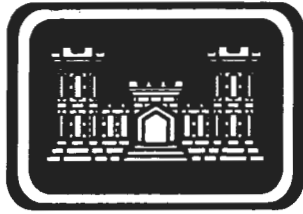




AV ENVIRONMENTAL RESTORATION
SERVICES UNDER DERP at
SENECA ARMY DEPOT ACTIVITY



**U.S. Army Corps
of Engineers**

Huntsville Division

Contract No. DACA87-95-D-0031

**COST PROPOSAL FOR
ANNEX E
REMEDIAL INVESTIGATIONS / FEASIBILITY STUDIES
AT THE RADIOLOGICAL WASTE BURIAL SITES,
(SEAD-12),
SENECA ARMY DEPOT ACTIVITY, ROMULUS, NEW YORK**

Prepared For:

**U.S. ARMY CORPS OF ENGINEERS
HUNTSVILLE DIVISION**

Prepared By:

PARSONS ENGINEERING SCIENCE, INC.

MARCH 25, 1996

CONTRACT PRICING PROPOSAL COVER SHEET
(Cost or Pricing Data Required)

1. SOLICITATION/CONTRACT/MODIFICATION NUMBER

DACA87-95-D-0031

OMB NO.: 9000-0013

Expires: 09/30/98

Public reporting burden for this collection of information is estimated to average 4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the FAR Secretariat (VRS), Office of Federal Acquisition Policy, GSA, Washington, DC 20405.

2a. NAME OF OFFEROR Parsons Engineering Science, Inc.			3a. NAME OF OFFEROR'S POINT OF CONTACT Mr. Wilson H. Rownd		3c. TELEPHONE AREA CODE (216) NUMBER 486-9005	
2b. FIRST LINE ADDRESS Prudential Center			3b. TITLE OF OFFEROR'S POINT OF CONTACT Vice President			
2c. STREET ADDRESS 101 Huntington Avenue			4. TYPE OF CONTRACT ACTION (Check)			
2d. CITY Boston			2e. STATE MA		2f. ZIP CODE 02199	
5. TYPE OF CONTRACT (Check) ☐ FFP ☒ CPFF ☐ CPIF ☐ CPAF ☐ FPI ☐ OTHE (Specify)			☐ A. NEW CONTRACT ☐ B. CHANGE ORDER ☐ C. PRICE REVISION/REDETERMINATION		☒ D. LETTER CONTRACT ☐ E. UNPRICED ORDER ☒ F. OTHER (Specify) Task Order - Annex E	
			6. PROPOSED COST (A+B=C)			
			A. COST \$2,252,882		B. PROFIT/FEE \$101,759	
			C. TOTAL \$2,360,641			

7. PERFORMANCE

PLACE	a. Seneca Army Depot Activity, Romulus NY	PERIOD	a. April 1996 to December 1998
	b.		b.

8. List and reference the identification, quantity and total price proposed for each contract line item. A line item cost breakdown supporting this recap is required unless otherwise specified by the Contracting Officer. (Continue on reverse, and then on plain paper, if necessary. Use same headings.)

a. LINE ITEM NO.	b. IDENTIFICATION	c. QUANTITY	d. TOTAL PRICE	e. PROP. REF. PAG
1	RI/FS at SEAD-12	1	\$2,360,641	

9. PROVIDE THE FOLLOWING (If available)

NAME OF CONTRACT ADMINISTRATION OFFICE DCMO Glendale; DCMDW-GVLP/LE3 (W. Loesch)			NAME OF AUDIT OFFICE Branch Manager: Harold Jarvis Defense Contract Audit Agency; San Gabriel Valley Branch Office		
STREET ADDRESS West Broadway, Third Floor			STREET ADDRESS 1000 East Garvey Avenue South, Suite 300		
CITY Glendale			CITY West Covina		STATE CA
STATE CA			STATE CA		ZIP CODE 91204-1297
ZIP CODE 91204-1297			ZIP CODE 91790-2900		
TELEPHONE AREA CODE (818) NUMBER 500-4525			TELEPHONE AREA CODE (818) NUMBER 918-5922		

10. WILL YOU REQUIRE THE USE OF ANY GOVERNMENT PROPERTY IN THE PERFORMANCE OF THIS WORK? (If "Yes," identify) ☐ YES ☒ NO		11a. DO YOU REQUIRE GOVERNMENT CONTRACT FINANCING TO PERFORM THIS PROPOSED CONTRACT? (If "Yes," complete Item 11b) ☐ YES ☒ NO		11b. TYPE OF FINANCING (Check one) ☐ ADVANCE PAYMENTS ☐ PROGRESS PAYMENTS ☐ GUARANTEED LOANS	
12. HAVE YOU BEEN AWARDED ANY CONTRACTS OR SUBCONTRACTS FOR THE SAME OR SIMILAR ITEMS WITHIN THE PAST 3 YEARS? (If "Yes," identify item(s), customer(s) and contract number(s) on reverse of form) ☐ YES ☒ NO		13. IS THIS PROPOSAL CONSISTANT WITH YOUR ESTABLISHED ESTIMATING AND ACCOUNTING PRACTICES AND PROCEDURES AND FAR PART 31, COST PRINCIPLES? (If "No," explain on reverse of form) ☒ YES ☐ NO			

14. COST ACCOUNTING STANDARDS BOARD (CASB) DATA

(Public Law 91-379 as amended and FAR PART 30)

a. WILL THIS CONTRACT ACTION BE SUBJECT TO CASB REGULATIONS? (If "No," explain in proposal) ☒ YES ☐ NO		b. HAVE YOU SUBMITTED A CASB DISCLOSURE STATEMENT (CASB DS-1 or 2)? (If "Yes," specify in proposal the office to which submitted and if determined to be adequate) ☒ YES ☐ NO Adequate (See Block 9)	
c. HAVE YOU BEEN NOTIFIED THAT YOU ARE OR MAY BE IN NONCOMPLIANCE WITH YOUR DISCLOSURE STATEMENT OR COST ACCOUNTING STANDARDS? (If "Yes," explain in proposal) ☐ YES ☒ NC		d. IS ANY ASPECT OF THIS PROPOSAL INCONSISTANT WITH YOUR DISCLOSED PRACTICES OR APPLICABLE COST ACCOUNTING STANDARDS? (If "Yes," explain in proposal) ☐ YES ☒ NO	

This proposal is submitted in response to the solicitation, contract, modification, etc. in item 1 and reflects our best estimates and/or actual costs; as of this date and conforms with the instructions in FAR 15.804-6(b) (1), Table 15-2. By submitting this proposal, the offeror, if selected for negotiation, grants the contracting officer and authorized representative(s) the right to examine, at any time before award, those records, which include books, documents, accounting procedures and practices, and other data, regardless of type and regardless of whether such items are in written form, in the form of computer data, or any other form, or whether such supporting information is specifically referenced or included in the proposal as the basis for pricing, that will permit an adequate evaluation of the proposed price.

15. NAME OF OFFEROR (Type) Mr. Wilson Rownd	15. TITLE OF OFFEROR (Type) Vice President	16. NAME OF FIRM Parsons Engineering Science, Inc.
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17. SIGNATURE

18. DATE OF SUBMISSION
03/25/96

CERTIFICATE OF CURRENT COST OR PRICING DATA

This is to certify that, to the best of my knowledge and belief, the cost or pricing data (as defined in section 15.801 of the Federal Acquisition Regulation (FAR) and required under FAR subsection 15.804-2) submitted, either actually or by specific identification in writing, to the Contracting Officer or the Contracting Officer's Representative in support of Contract DACA87-95-D-0031, Annex E, are accurate, complete, and current as of March 25, 1996. This certification includes the cost or pricing data supporting any advance agreements between the offeror and the Government that are part of the proposal.

Firm: Parsons Engineering Science, Inc.

Name: _____

Title: _____

Date of Execution: _____

**COST AND PRICING DATA FOR
COST PROPOSAL FOR
ANNEX E
TO CONTRACT NO. DACA87-95-D-0031**

1.0 LABOR AND OVERHEAD RATES. Direct labor rates used in preparing the cost proposal for the base Scope of Work tasks are the base year rates contained in the subject contract. Direct labor rates for the optional Scope of Work tasks are the Base Year 1 rates contained in the subject contract. Overhead rates used in preparing the cost proposal are the rates contained in the subject contract. The rates are applied in accordance with our disclosure statement.

2.0 JUDGMENTAL FACTORS. The number of labor hours and quantities of other items required to perform each task are estimated using engineering judgment and analysis of the work to be performed. The analysis considered the difficulty and complexity of each work element and assumed efficient use of resources to accomplish the tasks. Where possible, the records of efforts required to perform similar types of work were used to estimate the labor hour requirements. The mix of labor categories to accomplish tasks was designed to minimize the overall cost.

The estimated labor hours for each labor category required to perform each task described in Annex E are identified in the cost proposal.

3.0 TRAVEL AND LIVING EXPENSES

3.1 Air Travel. Air fares used are standard coach fares obtained by contacting Thomas Cook Travel, Boston Massachusetts.

3.2 Personal Automobile. A rate of \$0.31/mile was used for personal automobile use.

3.3 Rental Cars. Automobile rental rates are based on \$55/day. The daily rental rate was formulated on the following methodology:

Daily rental mid-size car	\$38.00/day
Excess mileage @ \$0.23/mile (estimated @ 100 miles per 3-day trip)	\$7.66/day
Sales tax (@ 7%)	\$2.74/day
Gasoline costs (estimated 18 gallons @ \$1.10/gal per 3-day trip)	\$6.60/day
TOTAL	\$55.00/day

Please note that in addition to the rental rate shown above, tolls and parking costs may be incurred. These were estimated at cost.

3.4 Per Diem. Per diem rates are based upon the current FTR rate of \$96/day for the Romulus, New York area.

4.0 OTHER DIRECT COSTS

4.1 Reproduction Costs. Costs for photocopies are based on the current estimated cost of \$0.05/copy, and blueprints on the current estimated cost of \$1.00/Sheet. These costs have been reviewed by DCAA and accepted by our ACO.

4.2 Equipment. Equipment costs are based on the Parsons ES standard schedule included in Section 2 of our cost proposal for the basic contract.

4.3 Telephone/Telex. Rates for telephone calls were determined using a \$4.00/call tariff. Fax costs were estimated at \$1.00 per page.

4.4 Postage.

4.4.1 U.S. Mail Letters, The rates are current postal rates of \$0.54 per letter.

4.4.2 Express Mail, The rates proposed are based on \$14.50 each for standard overnight letter, and \$96.25 for 50 lb package.

4.5 Computer Usage. Costs for computer usage are based on current estimated costs of \$5.00/hour for CADD and \$3.70/hour for word processing and technical calculations on personal computers. These costs have been reviewed by DCAA and accepted by our ACO.

5.0 SUBCONTRACTORS

5.1 Analytical Costs. Analytical costs are based upon the unit prices from our team subcontractor Inchcape Testing Services, Aquatic Laboratories, of Colchester, VT that are contained in the subject contract. Unit prices used in preparing the cost proposal for the base Scope of Work tasks are the base year rates.

Analytical costs for the radiological samples were solicited from four (4) subcontractors : Core Laboratories Inc., Accu-Labs Research, Inc., Babcock & Wilcox (Nuclear Environmental Services, Inc.) and Davi Laboratories, Environmental Associates. Davi Laboratories, Environmental Associates is a small-woman owned business and Accu-Labs Research is a small business. The lowest bid was received from a cost quotation from Core Laboratories of Casper WY and we have included these costs as part of our cost proposal and attached the cost quotation as back-up. Parsons ES will provide Huntsville with the request to subcontract following our cost negotiations.

5.2 Surveying. Surveying costs are based upon a quotation received from our team subcontractor Modi Engineers and Land Surveyors using the labor and overhead rates included in the subject contract. Modi Engineers and Land Surveyors is a small minority business enterprise. The cost quotation from Modi has been attached as part of our cost proposal. Parsons ES will provide Huntsville with the request to subcontract following our cost negotiations.

5.3 Photogrammetry. Photogrammetry costs are based upon a quotation received from our team subcontractor Lockwood Mapping, Inc. using the labor and overhead rates included in the subject contract. Lockwood Mapping is a small business enterprise. The cost

quotation from Lockwood has been attached as part of our cost proposal. Parsons ES will provide Huntsville with the request to subcontract following our cost negotiations.

- 5.4 Drilling. Unit price drilling cost quotations were solicited from three subcontractors: Huntingdon, North Star Drilling, and American Auger. North Star Drilling and American Auger are Small Businesses. The lowest evaluated bid was received from North Star Drilling and their costs are included in this proposal and attached as back-up.
- 5.5 Waste Disposal Unit price quotations for waste disposal were solicited from two subcontractors: Environmental Waste Resources, Inc. of Waterbury, CT, and Clean Harbors, Inc. of Rochester, NY. Only Environmental Waste Resources responded and their costs are included in this proposal and attached as back-up.
- 5.6 Mark-up on Subcontractors A 3% material handling reimbursable cost was applied on all Subcontractor charges in accordance with our basic contract negotiation agreement.

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

SUMMARY
7 Item Breakdown
Tasks 1 thru 13

Prop No: 979002-00001

(1) DIRECT LABOR SUMMARY

	TASK	HOURS	AMOUNT
	Task # 1	1,348	\$27,851
	Task # 2	9,284	\$205,862
	Task # 3	150	\$4,993
	Task # 4	200	\$6,658
	Task # 5	152	\$3,744
	Task # 6	256	\$6,382
	Task # 7	800	\$22,436
	Task # 8	1,000	\$24,932
	Task # 9	140	\$4,186
	Task # 10	700	\$17,449
	Task # 11	700	\$17,168
	Task # 12	600	\$18,672
	Task # 13	580	\$23,912
(2)	DIRECT LABOR	15,910	\$384,245
(3)	OVERHEAD ON DIRECT LABOR	1.43	\$549,470
(4)	GEN and ADMIN OVERHEAD (inc. in 3 above)		\$0
(5)	MATERIALS and SUPPLIES		\$27,204
(6)	TRAVEL		\$164,758
(7)	OTHERS		\$213,413
		SUBTOTAL ITEMS 1-7	\$1,339,089
(8)	SUBCONTRACTOR		\$913,792
		PROJECT TOTAL	\$2,252,882
(9)	PROFIT or FEE		\$107,759
	4.78%	Percent of project total.	
			=====
		TOTAL ESTIMATE	\$2,360,641

Client: U.S. Army Corps of Engineers

Printed:

2-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E

Prop No: 979002-00001

FEE

DISTRIBUTION

Tasks 1 thru 13

<u>TASK</u>	<u>AMOUNT</u>	<u>SUBCONTRACTOR</u>	<u>AMT W/O</u> <u>SUBCONTRACTOR</u>	<u>FEE</u>	<u>TOTAL</u>
Task # 1	\$94,849	\$0	\$94,849	\$5,691	\$100,540
Task # 2	\$1,706,222	\$913,792	\$792,430	\$74,960	\$1,781,182
Task # 3	\$12,818	\$0	\$12,818	\$769	\$13,588
Task # 4	\$17,219	\$0	\$17,219	\$1,033	\$18,252
Task # 5	\$10,330	\$0	\$10,330	\$620	\$10,949
Task # 6	\$15,658	\$0	\$15,658	\$939	\$16,598
Task # 7	\$55,575	\$0	\$55,575	\$3,334	\$58,909
Task # 8	\$89,320	\$0	\$89,320	\$5,359	\$94,679
Task # 9	\$10,597	\$0	\$10,597	\$636	\$11,232
Task # 10	\$43,874	\$0	\$43,874	\$2,632	\$46,506
Task # 11	\$72,799	\$0	\$72,799	\$4,368	\$77,166
Task # 12	\$59,319	\$0	\$59,319	\$3,559	\$62,878
Task # 13	\$64,303	\$0	\$64,303	\$3,858	\$68,161
	=====	=====	=====	=====	
TOTAL	\$2,252,882	\$913,792	\$1,339,089	\$107,759	
					=====
PROJECT TOTAL					\$2,360,641

Client:	U.S. Army Corps of Engineers Huntsville Division	Printed:	22-Mar-96	Parsons Engineering Science, Inc.
Project:	Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas SEAD-12 Annex E			SUMMARY Base Tasks 1 thru 13
Prop No:	979002-00001			

	<u>Unit Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74 /hour		100	\$5,874	
Professional Level 6, Step 1 (P62)	\$46.47 /hour		0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11 /hour		1162	\$51,256	
Professional Level 5, Step 3 (P56)	\$37.99 /hour		200	\$7,598	
Professional Level 5, Step 2 (P54)	\$32.91 /hour		1205	\$39,657	
Professional Level 5, Step 1 (P52)	\$29.39 /hour		240	\$7,054	
Professional Level 4, Step 2 (P48)	\$29.13 /hour		2020	\$58,843	
Professional Level 4, Step 1 (P42)	\$25.20 /hour		2134	\$53,777	
Professional Level 3, Step 1 (P35)	\$24.04 /hour		0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09 /hour		110	\$2,540	
Professional Level 2, Step 1 (P22)	\$19.89 /hour		1931	\$38,408	
Professional Level 1, Step 2 (P18)	\$18.57 /hour		3399	\$63,119	
Professional Level 1, Step 1 (P12)	\$14.84 /hour		416	\$6,173	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10 /hour		680	\$14,348	
Technician Level 4, Step 2 (T48)	\$16.58 /hour		1655	\$27,440	
Technician Level 4, Step 1 (T42)	\$14.08 /hour		0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99 /hour		0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61 /hour		0	\$0	
Technician Level 2 (T25)	\$10.13 /hour		0	\$0	
Technician Level 1 (T15)	\$8.89 /hour		0	\$0	
Support Level 3 (S35)	\$20.61 /hour		0	\$0	
Support Level 2 (S25)	\$12.40 /hour		658	\$8,159	
Support Level 1 (S15)	\$8.72 /hour		0	\$0	
TOTAL HOURS/LABOR COST			15910	\$384,245	
Contract Year:	1				
Base Yr					
Overhead Rate:	143%				
			Labor Burden:	\$549,470	
			SUBTOTAL BURDENED LABOR:	\$933,715	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

SUMMARY
Base Tasks 1 thru 13

Prop No: 979002-00001

	<u>Unit</u>			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
MATERIALS AND SUPPLIES				
Bottle labels	\$20.00	/roll	6	\$120
40 mL VOA Vials	\$122.74	/case	8	\$982
1 Liter Amber Bottles	\$37.95	/case	23	\$873
32 oz. HDPE Bottles	\$30.75	/case	11	\$338
Braided Nylon Rope	\$0.15	/foot	500	\$75
Bubble Pack	\$84.00	/roll	12	\$1,008
Decon Eqt	\$18.00	/kit	12	\$216
55g drums fill/mov	\$100.00	each	0	\$0
Field Notebook	\$14.00	each	27	\$378
Ice	\$1.00	/bag	100	\$100
Latex Gloves	\$10.00	/box	40	\$400
Methanol (Optima)	\$25.00	/bottle	7	\$175
Hexane (Optima)	\$25.00	/bottle	2	\$50
Acetone (Optima)	\$50.00	/bottle	2	\$100
HCl (Optima)	\$285.00	/bottle	5	\$1,425
HNO3 (Optima)	\$175.00	/bottle	5	\$875
Ascorbic Acid	\$10.00	/bottle	0	\$0
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0
Overboots	\$4.00	/pair	883	\$3,532
Respirator Cartridges	\$15.00	/pair	218	\$3,270
Packing Tape (doz)	\$72.00	/case	7	\$504
Padlocks	\$12.00	each	0	\$0
Sampling Tables	\$40.00	each	13	\$520
Radiological Badges	\$20.00	each	34	\$680
Aluminum Foil	\$1.00	/roll	10	\$10
Stain Stl bwl/spn	\$30.00	/set	16	\$480
Survey Stake/Flag	\$20.00	/bundle	46	\$920
Teflon tape	\$8.00	/roll	0	\$0
Tyveks	\$6.30	each	889	\$5,601
Water (HPLC Grade)	\$97.00	/case	31	\$3,007
Ziplock bags	\$3.00	/box	13	\$39
Calibration Gas	\$450.00	/tank	0	\$0
Ultra Pure Air	\$310.00	/ton	0	\$0
Teflon Tubing	\$120.00	/roll	0	\$0
Teflon Sheeting	\$500.00	/roll	0	\$0
Folding Live Traps	\$15.00	each	10	\$150
Glassware	\$25.00	each	0	\$0
Quartz Filters	\$10.00	each	0	\$0
Vermiculite Packing	\$16.00	/bag	86	\$1,376
SUBTOTAL MATLS & SUPPLIES:				\$27,204

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

SUMMARY
Base Tasks 1 thru 13

Prop No: 979002-00001

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
TRAVEL					
Airfare Boston\Syracuse	\$500.00 /trip		49	\$24,500	
Airfare Boston\Huntsville	\$900.00 /trip		0	\$0	
Subsistence-Seneca	\$96.00 /day		892	\$85,632	
Subsistence-Huntsville	\$89.00 /day		0	\$0	
Parking,Airport	\$13.00 /day		728	\$9,464	
Auto Rental	\$55.00 /day		374	\$20,570	
Suburban\Van rental	\$585.00 /week		40.5	\$23,693	
Mileage	\$0.31 /mile		2900	\$899	
SUBTOTAL TRAVEL:				\$164,758	

OTHERS

IN-HOUSE SERVICES

Telephone	\$4.00 /call	1470	\$5,880
Word Proc/PC	\$3.70 /hour	628	\$2,324
CADD	\$5.00 /hour	260	\$1,300
Facsimile	\$1.00 /page	2930	\$2,930
Overnight Express			
Letter/2 lb pack	\$14.50 each	197	\$2,857
Package (50 lbs)	\$96.25 each	316	\$30,415
Mail 4-lb pack	\$4.10 /pack	0	\$0
Mail letters	\$0.54 /letter	0	\$0

Subtotal Services \$45,705

REPRODUCTION

Photocopier	\$0.05 /page	501400	\$25,070
Aerial Photo repro	\$10.00 /photo	10	\$100
Blueline repro	\$1.00 /Sheet	5670	\$5,670
Cronoflex Prod	\$5.50 /Sq Ft	0	\$0
3-ring binders	\$15.00 each	957	\$14,355
Color Copies	\$2.00 /page	2585	\$5,170

Subtotal Reproduction \$50,365

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

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RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

SUMMARY
Base Tasks 1 thru 13

Prop No: 979002-00001

	<u>Unit</u>			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
<u>Notes</u>				
EQUIPMENT RENTAL				
EARTH SCIENCES EQUIPMENT				
Bailer	\$55.00 /week		16	\$880
Magnetometer	\$42.00 /week		0	\$0
pH/Cond meter	\$50.00 /week		5	\$250
Flow thru pH/Cond meter	\$257.00 /week		4	\$1,028
DO meter	\$55.00 /week		5	\$275
Soil Gas Supplies	\$50.00 /day		8	\$400
Slug test eqt	\$50.00 /week		2	\$100
Water level ind	\$40.00 /week		8	\$320
Turbidimeter	\$30.00 /week		4	\$120
Data Logger, Trnsdcr	\$135.00 /day		2	\$270
Flow Meter	\$30.00 /week		2	\$60
Water coolers	\$40.00 /month		11.5	\$460
Equipment Trailer	\$1,000.00 /month		11.5	\$11,500
Grundfus Redi Flow Pump	\$64.00 /day		37	\$2,368
PUF Sampler	\$150.00 /week		0	\$0
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0
Hi- Vol Sampler	\$75.00 /week		6	\$450
Hi- Vol Sampler Calibration Kit	\$25.00 /day		14	\$350
Ponar Sediment Sampler	\$27.00 /day		11	\$297
3.2 kw Generator	\$50.00 /day		37	\$1,850
Seismograph	\$200.00 /day		5	\$1,000
EM-31	\$85.00 /day		150	\$12,750
GPR	\$500.00 /day		15	\$7,500
Subtotal Rental				\$42,228
HEALTH & SAFETY EQUIPMENT				
HNu Meter	\$50.00 /day		419	\$20,950
Alpha Survey Meter	\$80.00 /week		300	\$24,000
Alpha Scintillation Counter	\$100.00 /week		9	\$900
Beta Sample Counter	\$100.00 /week		9	\$900
Gas Proportional Detector	\$100.00 /week		9	\$900
Gas Prop. Detector-Floor	\$100.00 /week		8	\$800
Radon Monitor	\$300.00 /week		2	\$600
Gamma Radiation Meter	\$50.00 /day		372	\$18,600
Calib Gas	\$10.00 /day		392	\$3,920
2-way radios	\$15.00 /ea/wk		74	\$1,110
Air Purif Resp	\$20.00 /week		36	\$720
10-Gal Eye Wash	\$35.00 /week		49	\$1,715
Combination SCBA/SAR	\$150.00 /day		0	\$0
Subtotal H & S				\$75,115
SUBTOTAL OTHERS:				\$213,413
SUBTOTAL LABOR & ODC'S:				\$1,339,089

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

SUMMARY
Base Tasks 1 thru 13

Prop No: 979002-00001

	<u>Unit</u>	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
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SUBCONTRACTORS

GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	160	\$64,000
Pest./PCBs (TCL)	\$180.00 each	160	\$28,800
Total Metals & CN(TAL)	\$170.00 each	160	\$27,200
Iron(Ferrous)	\$30.00 each	74	\$2,220
Sulfide	\$30.00 each	74	\$2,220
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (EPA 9060)	\$25.00 each	117	\$2,925
TOX (EPA 9056)	\$50.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
BOD	\$60.00 each	74	\$4,440
Sulfate(EPA 300)	\$25.00 each	74	\$1,850
COD	\$50.00 each	74	\$3,700
pH (EPA 9045)	\$8.00 each	0	\$0
Volatiles (EPA 524)	\$195.00 each	226	\$44,070
Hardness(EPA 130.2)	\$15.00 each	117	\$1,755
Alkalinity(EPA 310)	\$12.00 each	117	\$1,404
Nitrate (EPA 353.2)	\$20.00 each	117	\$2,340

SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	306	\$55,080
B/N/A (TCL)	\$400.00 each	306	\$122,400
Pest./PCBs (TCL)	\$180.00 each	306	\$55,080
Total Metals & CN(TAL)	\$170.00 each	306	\$52,020
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (L. Kahn)	\$60.00 each	55	\$3,300
TOX (EPA 9056)	\$70.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	55	\$440
Nitrate (EPA 353.2)	\$20.00 each	306	\$6,120

Subtotal Team Laboratory	\$481,364
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MISC. LABORATORY ANALYSIS

Grain Size Dist	\$120.00 each	55	\$6,600
TCLP	\$1,500.00 each	12	\$18,000
Moisture Content	\$15.00 each	0	\$0
Bulk Density	\$35.00 each	15	\$525
Chromium (Level II)	\$30.00 each	0	\$0
Total Suspended Solids	\$20.00 each	43	\$860
Total Dissolved Solids	\$20.00 each	117	\$2,340
Ammonia	\$25.00 each	43	\$1,075
Phosphate	\$25.00 each	43	\$1,075
Cation Exchange Capacity	\$100.00 each	55	\$5,500

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

SUMMARY
Base Tasks 1 thru 13

Prop No: 979002-00001

	<u>Unit</u>	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
RADIOLOGICAL LABORATORY ANALYSIS						
Water Samples For:						
Thorium 232, 230, 227		\$60.00	each	157	\$9,420	
Uranium 238, 235, 233+234		\$60.00	each	157	\$9,420	
Radium 226,223		\$40.00	each	157	\$6,280	
Pb214&211,Bi214,Ce137,Co60		\$80.00	each	157	\$12,560	
Plutonium 239 + 240		\$65.00	each	157	\$10,205	
Americium 241		\$65.00	each	157	\$10,205	
Gross Alpha&Beta		\$45.00	each	157	\$7,065	
Soil Samples For:						
Thorium 232, 230, 227		\$60.00	each	399	\$23,940	
Uranium 238, 235, 233+234		\$60.00	each	399	\$23,940	
Radium 226,223		\$40.00	each	399	\$15,960	
Pb214&211,Bi214,Ce137,Co60		\$0.00	each	399	\$0	
Plutonium 239 + 240		\$65.00	each	399	\$25,935	
Americium 241		\$65.00	each	399	\$25,935	
Gamma Spectrometry		\$0.00				
Dist. Coef.(ASTM D:4319-83)		\$750.00	each	8	\$6,000	
Sample Prep/Return		\$0.00	each	399	\$0	
Wipe Samples For:						
Thorium 232, 230, 227		\$60.00	each	134	\$8,040	
Uranium 238, 235, 233+234		\$60.00	each	134	\$8,040	
Radium 226,223		\$40.00	each	134	\$5,360	
Pb214&211,Bi214,Ce137,Co60		\$80.00	each	134	\$10,720	
Plutonium 239 + 240		\$65.00	each	134	\$8,710	
Americium 241		\$65.00	each	134	\$8,710	
Gross Alpha&Beta		\$45.00	each	134	\$6,030	
AIR SAMPLES LABORATORY ANALYSIS						
SVOC's		\$490.00	each	0	\$0	
Metals		\$150.00	each	0	\$0	
Radon (Alpha Film)		\$25.00	each	100	\$2,500	
Subtotal Misc. Laboratory					\$280,950	
INVESTIGATION SUBCONTRACTORS						
Driller	Lump Sum	each		50515	\$50,515	
Photogrammetry	Lump Sum	each		31600	\$31,600	
IDW Disposal	Lump Sum	each		9990	\$9,990	
Surveyor	Lump Sum	each		32758	\$32,758	
Subtotal Investigation Subcontractors					\$124,863	
Subtotal Laboratory & Investigation Subcontractors:					\$887,177	
3% Mark-up:					\$26,615	
SUBTOTAL SUBCONTRACTORS:					\$913,792	
					=====	
TASK TOTAL:					\$2,252,882	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 1
Preliminary Investigations

Prop No: 979002-00001

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74 /hour		0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47 /hour		0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11 /hour		20	\$882	
Professional Level 5, Step 3 (P56)	\$37.99 /hour		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91 /hour		44	\$1,448	
Professional Level 5, Step 1 (P52)	\$29.39 /hour		0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13 /hour		280	\$8,156	
Professional Level 4, Step 1 (P42)	\$25.20 /hour		0	\$0	
Professional Level 3, Step 1 (P35)	\$24.04 /hour		0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09 /hour		20	\$462	
Professional Level 2, Step 1 (P22)	\$19.89 /hour		228	\$4,535	
Professional Level 1, Step 2 (P18)	\$18.57 /hour		280	\$5,200	
Professional Level 1, Step 1 (P12)	\$14.84 /hour		416	\$6,173	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10 /hour		0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58 /hour		60	\$995	
Technician Level 4, Step 1 (T42)	\$14.08 /hour		0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99 /hour		0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61 /hour		0	\$0	
Technician Level 2 (T25)	\$10.13 /hour		0	\$0	
Technician Level 1 (T15)	\$8.89 /hour		0	\$0	
Support Level 3 (S35)	\$20.61 /hour		0	\$0	
Support Level 2 (S25)	\$12.40 /hour		0	\$0	
Support Level 1 (S15)	\$8.72 /hour		0	\$0	
TOTAL HOURS/LABOR COST			1348	\$27,851	
Contract Year: 1					
Base Yr					
Overhead Rate: 143%					
Labor Burden:				\$39,827	
SUBTOTAL BURDENED LABOR:				\$67,678	

Client: U.S. Army Corps of Engineers
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RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 1
Preliminary Investigations

Prop No: 979002-00001

	<u>Unit</u>				
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00	/roll	0	\$0	
40 mL VOA Vials	\$122.74	/case	0	\$0	
1 Liter Amber Bottles	\$37.95	/case	0	\$0	
32 oz. HDPE Bottles	\$30.75	/case	0	\$0	
Braided Nylon Rope	\$0.15	/foot	0	\$0	
Bubble Pack	\$84.00	/roll	0	\$0	
Decon Eqt	\$18.00	/kit	0	\$0	
55g drums fill/mov	\$100.00	each	0	\$0	
Field Notebook	\$14.00	each	5	\$70	
Ice	\$1.00	/bag	0	\$0	
Latex Gloves	\$10.00	/box	5	\$50	
Methanol (Optima)	\$25.00	/bottle	0	\$0	
Hexane (Optima)	\$25.00	/bottle	0	\$0	
Acetone (Optima)	\$50.00	/bottle	0	\$0	
HCl (Optima)	\$285.00	/bottle	0	\$0	
HNO3 (Optima)	\$175.00	/bottle	0	\$0	
Ascorbic Acid	\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0	
Overboots	\$4.00	/pair	100	\$400	
Respirator Cartridges	\$15.00	/pair	50	\$750	
Packing Tape (doz)	\$72.00	/case	1	\$72	
Padlocks	\$12.00	each	0	\$0	
Sampling Tables	\$40.00	each	2	\$80	
Radiological Badges	\$20.00	each	5	\$100	
Aluminum Foil	\$1.00	/roll	10	\$10	
Stain Stl bwl/spn	\$30.00	/set	0	\$0	
Survey Stake/Flag	\$20.00	/bundle	5	\$100	
Teflon tape	\$8.00	/roll	0	\$0	
Tyveks	\$6.30	each	100	\$630	
Water (HPLC Grade)	\$97.00	/case	0	\$0	
Ziplock bags	\$3.00	/box	10	\$30	
Calibration Gas	\$450.00	/tank	0	\$0	
Ultra Pure Air	\$310.00	/ton	0	\$0	
Teflon Tubing	\$120.00	/roll	0	\$0	
Teflon Sheeting	\$500.00	/roll	0	\$0	
Folding Live Traps	\$15.00	each	0	\$0	
Glassware	\$25.00	each	0	\$0	
Quartz Filters	\$10.00	each	0	\$0	
Vermiculite Packing	\$16.00	/bag	0	\$0	
SUBTOTAL MATLS & SUPPLIES:				\$2,292	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 1
Preliminary Investigations

Prop No: 979002-00001

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
TRAVEL					
Airfare Boston\Syracuse	\$500.00 /trip		4	\$2,000	
Airfare Boston\Huntsville	\$900.00 /trip		0	\$0	
Subsistence-Seneca	\$96.00 /day		135	\$12,960	
Subsistence-Huntsville	\$89.00 /day		0	\$0	
Parking,Airport	\$13.00 /day		60	\$780	
Auto Rental	\$55.00 /day		30	\$1,650	
Suburban\Van rental	\$585.00 /week		4	\$2,340	
Mileage	\$0.31 /mile		100	\$31	
SUBTOTAL TRAVEL:				\$19,761	

OTHERS

IN-HOUSE SERVICES

Telephone	\$4.00 /call	60	\$240
Word Proc/PC	\$3.70 /hour	0	\$0
CADD	\$5.00 /hour	0	\$0
Facsimile	\$1.00 /page	60	\$60
Overnight Express			
Letter/2 lb pack	\$14.50 each	0	\$0
Package (50 lbs)	\$96.25 each	10	\$963
Mail 4-lb pack	\$4.10 /pack	0	\$0
Mail letters	\$0.54 /letter	0	\$0

Subtotal Services \$1,263

REPRODUCTION

Photocopier	\$0.05 /page	5500	\$275
Aerial Photo repro	\$10.00 /photo	0	\$0
Blueline repro	\$1.00 /Sheet	0	\$0
Cronoflex Prod	\$5.50 /Sq Ft	0	\$0
3-ring binders	\$15.00 each	0	\$0
Color Copies	\$2.00 /page	0	\$0

Subtotal Reproduction \$275

Client: U.S. Army Corps of Engineers
Huntsville Division

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Parsons Engineering Science, Inc.

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SEAD-12
Annex E

Task # 1
Preliminary Investigations

Prop No: 979002-00001

	<u>Unit</u>	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
EQUIPMENT RENTAL						
EARTH SCIENCES EQUIPMENT						
Bailer	\$55.00 /week			0	\$0	
Magnetometer	\$42.00 /day			0	\$0	
pH/Cond meter	\$50.00 /week			0	\$0	
Flow thru pH/Cond meter	\$257.00 /week			0	\$0	
DO meter	\$55.00 /week			0	\$0	
Soil Gas Supplies	\$50.00 /day			0	\$0	
Slug test eqt	\$50.00 /week			0	\$0	
Water level ind	\$40.00 /week			0	\$0	
Turbidimeter	\$30.00 /week			0	\$0	
Data Logger, Trnsdcr	\$135.00 /day			0	\$0	
Flow Meter	\$30.00 /week			0	\$0	
Water coolers	\$40.00 /month			1	\$40	
Equipment Trailer	\$1,000.00 /month			1	\$1,000	
Grundfus Redi Flow Pump	\$64.00 /day			0	\$0	
PUF Sampler	\$150.00 /week			0	\$0	
PUF Sampler Calibration Kit	\$25.00 /day			0	\$0	
Hi- Vol Sampler	\$75.00 /week			4	\$300	
Hi- Vol Sampler Calibration Kit	\$25.00 /day			4	\$100	
Ponar Sediment Sampler	\$27.00 /day			0	\$0	
3.2 kw Generator	\$50.00 /day			0	\$0	
Seismograph	\$200.00 /day			0	\$0	
EM-31	\$85.00 /day			0	\$0	
GPR	\$500.00 /day			0	\$0	
Subtotal Rental					\$1,440	
HEALTH & SAFETY EQUIPMENT						
HNu Meter	\$50.00 /day			20	\$1,000	
Alpha Survey Meter	\$80.00 /week			4	\$320	
Alpha Scintillation Counter	\$100.00 /week			0	\$0	
Beta Sample Counter	\$100.00 /week			0	\$0	
Gas Proportional Detector	\$100.00 /week			0	\$0	
Gas Prop. Detector-Floor	\$100.00 /week			0	\$0	
Radon Monitor	\$300.00 /week			0	\$0	
Gamma Radiation Meter	\$50.00 /day			4	\$200	
Calib Gas	\$10.00 /day			20	\$200	
2-way radios	\$15.00 /ea/wk			8	\$120	
Air Purif Resp	\$20.00 /week			8	\$160	
10-Gal Eye Wash	\$35.00 /week			4	\$140	
Combination SCBA/SAR	\$150.00 /day			0	\$0	
Subtotal H & S					\$2,140	
SUBTOTAL OTHERS:					\$5,118	
SUBTOTAL LABOR & ODC'S:					\$94,849	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 1
Preliminary Investigations

Prop No: 979002-00001

	<u>Unit</u>			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
<u>Notes</u>				
SUBCONTRACTORS				
GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS				
Volatiles (TCL)	\$180.00	each	0	\$0
B/N/A (TCL)	\$400.00	each	0	\$0
Pest./PCBs (TCL)	\$180.00	each	0	\$0
Total Metals & CN(TAL)	\$170.00	each	0	\$0
Iron(Ferrous)	\$30.00	each	0	\$0
Sulfide	\$30.00	each	0	\$0
Spec Cond(EPA 9050)	\$8.00	each	0	\$0
Total Organic Carbon (EPA 9060)	\$25.00	each	0	\$0
TOX (EPA 9056)	\$50.00	each	0	\$0
Chloride(EPA 9250)	\$25.00	each	0	\$0
BOD	\$60.00	each	0	\$0
Sulfate(EPA 300)	\$25.00	each	0	\$0
COD	\$50.00	each	0	\$0
pH (EPA 9045)	\$8.00	each	0	\$0
Volatiles (EPA 524)	\$195.00	each	0	\$0
Hardness(EPA 130.2)	\$15.00	each	0	\$0
Alkalinity(EPA 310)	\$12.00	each	0	\$0
Nitrate (EPA 353.2)	\$20.00	each	0	\$0
SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS				
Volatiles (TCL)	\$180.00	each	0	\$0
B/N/A (TCL)	\$400.00	each	0	\$0
Pest./PCBs (TCL)	\$180.00	each	0	\$0
Total Metals & CN(TAL)	\$170.00	each	0	\$0
Spec Cond(EPA 9050)	\$8.00	each	0	\$0
Total Organic Carbon (L. Kahn)	\$60.00	each	0	\$0
TOX (EPA 9056)	\$70.00	each	0	\$0
Chloride(EPA 9250)	\$25.00	each	0	\$0
pH (EPA 9045)	\$8.00	each	0	\$0
Nitrate (EPA 353.2)	\$20.00	each	0	\$0
Subtotal Team Laboratory				\$0
MISC. LABORATORY ANALYSIS				
Grain Size Dist	\$120.00	each	0	\$0
TCLP	\$1,500.00	each	0	\$0
Moisture Content	\$15.00	each	0	\$0
Bulk Density	\$35.00	each	0	\$0
Chromium (Level II)	\$30.00	each	0	\$0
Total Suspended Solids	\$20.00	each	0	\$0
Total Dissolved Solids	\$20.00	each	0	\$0
Ammonia	\$25.00	each	0	\$0
Phosphate	\$25.00	each	0	\$0
Cation Exchange Capacity	\$100.00	each	0	\$0

Client:	U.S. Army Corps of Engineers	Printed:	22-Mar-96	Parsons Engineering Science, Inc.
	Huntsville Division			
Project:	Seneca Army Depot Activity, Romulus New York		Task # 1	
	RI/FS at the Radiological Disposal Areas		Preliminary Investigations	
	SEAD-12			
	Annex E			
Prop No:	979002-00001			

	Unit Cost	Units	Quantity	Cost	Notes
RADIOLOGICAL LABORATORY ANALYSIS					
Water Samples For:					
Thorium 232, 230, 227	\$60.00 each		0	\$0	
Uranium 238, 235, 233+234	\$60.00 each		0	\$0	
Radium 226,223	\$40.00 each		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00 each		0	\$0	
Plutonium 239 + 240	\$65.00 each		0	\$0	
Americium 241	\$65.00 each		0	\$0	
Gross Alpha&Beta	\$45.00 each		0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00 each		0	\$0	
Uranium 238, 235, 233+234	\$60.00 each		0	\$0	
Radium 226,223	\$40.00 each		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00 each		0	\$0	
Plutonium 239 + 240	\$65.00 each		0	\$0	
Americium 241	\$65.00 each		0	\$0	
Gamma Spectrometry	\$0.00 each		0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00 each		0	\$0	
Sample Prep/Return	\$0.00 each		0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00 each		0	\$0	
Uranium 238, 235, 233+234	\$60.00 each		0	\$0	
Radium 226,223	\$40.00 each		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00 each		0	\$0	
Plutonium 239 + 240	\$65.00 each		0	\$0	
Americium 241	\$65.00 each		0	\$0	
Gross Alpha&Beta	\$45.00 each		0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00 each		0	\$0	
Metals	\$150.00 each		0	\$0	
Radon (Alpha Film)	\$25.00 each		0	\$0	
Subtotal Misc. Laboratory				\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum each		0	\$0	
Photogrammetry	Lump Sum each		0	\$0	
IDW Disposal	Lump Sum each		0	\$0	
Surveyor	Lump Sum each		0	\$0	
Subtotal Investigation Subcontractors				\$0	
Subtotal Laboratory & Investigation Subcontractors:				\$0	
3% Mark-up:				\$0	
SUBTOTAL SUBCONTRACTORS:				\$0	
=====					
TASK TOTAL:				\$94,849	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 1a
Site Visit and
Records Review

Prop No: 979002-00001

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74 /hour		0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47 /hour		0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11 /hour		4	\$176	
Professional Level 5, Step 3 (P56)	\$37.99 /hour		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91 /hour		4	\$132	
Professional Level 5, Step 1 (P52)	\$29.39 /hour		0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13 /hour		20	\$583	
Professional Level 4, Step 1 (P42)	\$25.20 /hour		0	\$0	
Professional Level 3, Step 1 (P35)	\$24.04 /hour		0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09 /hour		20	\$462	
Professional Level 2, Step 1 (P22)	\$19.89 /hour		0	\$0	
Professional Level 1, Step 2 (P18)	\$18.57 /hour		0	\$0	
Professional Level 1, Step 1 (P12)	\$14.84 /hour		0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10 /hour		0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58 /hour		0	\$0	
Technician Level 4, Step 1 (T42)	\$14.08 /hour		0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99 /hour		0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61 /hour		0	\$0	
Technician Level 2 (T25)	\$10.13 /hour		0	\$0	
Technician Level 1 (T15)	\$8.89 /hour		0	\$0	
Support Level 3 (S35)	\$20.61 /hour		0	\$0	
Support Level 2 (S25)	\$12.40 /hour		0	\$0	
Support Level 1 (S15)	\$8.72 /hour		0	\$0	
TOTAL HOURS/LABOR COST			48	\$1,352	
Contract Year: 1					
Base Yr					
Overhead Rate: 143%					
Labor Burden:				\$1,934	
SUBTOTAL BURDENED LABOR:				\$3,287	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 1a
Site Visit and
Records Review

Prop No: 979002-00001

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00	/roll	0	\$0	
40 mL VOA Vials	\$122.74	/case	0	\$0	
1 Liter Amber Bottles	\$37.95	/case	0	\$0	
32 oz. HDPE Bottles	\$30.75	/case	0	\$0	
Braided Nylon Rope	\$0.15	/foot	0	\$0	
Bubble Pack	\$84.00	/roll	0	\$0	
Decon Eqt	\$18.00	/kit	0	\$0	
55g drums fill/mov	\$100.00	each	0	\$0	
Field Notebook	\$14.00	each	0	\$0	
Ice	\$1.00	/bag	0	\$0	
Latex Gloves	\$10.00	/box	0	\$0	
Methanol (Optima)	\$25.00	/bottle	0	\$0	
Hexane (Optima)	\$25.00	/bottle	0	\$0	
Acetone (Optima)	\$50.00	/bottle	0	\$0	
HCl (Optima)	\$285.00	/bottle	0	\$0	
HNO3 (Optima)	\$175.00	/bottle	0	\$0	
Ascorbic Acid	\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0	
Overboots	\$4.00	/pair	0	\$0	
Respirator Cartridges	\$15.00	/pair	0	\$0	
Packing Tape (doz)	\$72.00	/case	0	\$0	
Padlocks	\$12.00	each	0	\$0	
Sampling Tables	\$40.00	each	0	\$0	
Radiological Badges	\$20.00	each	0	\$0	
Aluminum Foil	\$1.00	/roll	0	\$0	
Stain Stl bwl/spn	\$30.00	/set	0	\$0	
Survey Stake/Flag	\$20.00	/bundle	0	\$0	
Teflon tape	\$8.00	/roll	0	\$0	
Tyveks	\$6.30	each	0	\$0	
Water (HPLC Grade)	\$97.00	/case	0	\$0	
Ziplock bags	\$3.00	/box	0	\$0	
Calibration Gas	\$450.00	/tank	0	\$0	
Ultra Pure Air	\$310.00	/ton	0	\$0	
Teflon Tubing	\$120.00	/roll	0	\$0	
Teflon Sheeting	\$500.00	/roll	0	\$0	
Folding Live Traps	\$15.00	each	0	\$0	
Glassware	\$25.00	each	0	\$0	
Quartz Filters	\$10.00	each	0	\$0	
Vermiculite Packing	\$16.00	/bag	0	\$0	
SUBTOTAL MATLS & SUPPLIES:				\$0	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 1a
Site Visit and
Records Review

Prop No: 979002-00001

	Unit			
	Cost	Units	Quantity	Cost
TRAVEL				
Airfare Boston\Syracuse	\$500.00	/trip	0	\$0
Airfare Boston\Huntsville	\$900.00	/trip	0	\$0
Subsistence-Seneca	\$96.00	/day	0	\$0
Subsistence-Huntsville	\$89.00	/day	0	\$0
Parking,Airport	\$13.00	/day	0	\$0
Auto Rental	\$55.00	/day	0	\$0
Suburban\Van rental	\$585.00	/week	0	\$0
Mileage	\$0.31	/mile	0	\$0
SUBTOTAL TRAVEL:				\$0

OTHERS

IN-HOUSE SERVICES

Telephone	\$4.00	/call	10	\$40
Word Proc/PC	\$3.70	/hour	0	\$0
CADD	\$5.00	/hour	0	\$0
Facsimile	\$1.00	/page	10	\$10
Overnight Express				
Letter/2 lb pack	\$14.50	each	0	\$0
Package (50 lbs)	\$96.25	each	0	\$0
Mail 4-lb pack	\$4.10	/pack	0	\$0
Mail letters	\$0.54	/letter	0	\$0

Subtotal Services \$50

REPRODUCTION

Photocopier	\$0.05	/page	500	\$25
Aerial Photo repro	\$10.00	/photo	0	\$0
Blueline repro	\$1.00	/Sheet	0	\$0
Cronoflex Prod	\$5.50	/Sq Ft	0	\$0
3-ring binders	\$15.00	each	0	\$0
Color Copies	\$2.00	/page	0	\$0

Subtotal Reproduction \$25

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 1a
Site Visit and
Records Review

Prop No: 979002-00001

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00 /week		0	\$0	
Magnetometer	\$42.00 /day		0	\$0	
pH/Cond meter	\$50.00 /week		0	\$0	
Flow thru pH/Cond meter	\$257.00 /week		0	\$0	
DO meter	\$55.00 /week		0	\$0	
Soil Gas Supplies	\$50.00 /day		0	\$0	
Slug test eqt	\$50.00 /week		0	\$0	
Water level ind	\$40.00 /week		0	\$0	
Turbidimeter	\$30.00 /week		0	\$0	
Data Logger, Trnsdcr	\$135.00 /day		0	\$0	
Flow Meter	\$30.00 /week		0	\$0	
Water coolers	\$40.00 /month		0	\$0	
Equipment Trailer	\$1,000.00 /month		0	\$0	
Grundfus Redi Flow Pump	\$64.00 /day		0	\$0	
PUF Sampler	\$150.00 /week		0	\$0	
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0	
Hi- Vol Sampler	\$75.00 /week		0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00 /day		0	\$0	
Ponar Sediment Sampler	\$27.00 /day		0	\$0	
3.2 kw Generator	\$50.00 /day		0	\$0	
Seismograph	\$200.00 /day		0	\$0	
EM-31	\$85.00 /day		0	\$0	
GPR	\$500.00 /day		0	\$0	
Subtotal Rental				\$0	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00 /day		0	\$0	
Alpha Survey Meter	\$80.00 /week		0	\$0	
Alpha Scintillation Counter	\$100.00 /week		0	\$0	
Beta Sample Counter	\$100.00 /week		0	\$0	
Gas Proportional Detector	\$100.00 /week		0	\$0	
Gas Prop. Detector-Floor	\$100.00 /week		0	\$0	
Radon Monitor	\$300.00 /week		0	\$0	
Gamma Radiation Meter	\$50.00 /day		0	\$0	
Calib Gas	\$10.00 /day		0	\$0	
2-way radios	\$15.00 /ea/wk		0	\$0	
Air Purif Resp	\$20.00 /week		0	\$0	
10-Gal Eye Wash	\$35.00 /week		0	\$0	
Combination SCBA/SAR	\$150.00 /day		0	\$0	
Subtotal H & S				\$0	
SUBTOTAL OTHERS:				\$75	
SUBTOTAL LABOR & ODC'S:				\$3,362	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 1a
Site Visit and
Records Review

Prop No: 979002-00001

	<u>Unit</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
SUBCONTRACTORS					
GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS					
Volatiles (TCL)	\$180.00 each		0	\$0	
B/N/A (TCL)	\$400.00 each		0	\$0	
Pest./PCBs (TCL)	\$180.00 each		0	\$0	
Total Metals & CN(TAL)	\$170.00 each		0	\$0	
Iron(Ferrous)	\$30.00 each		0	\$0	
Sulfide	\$30.00 each		0	\$0	
Spec Cond(EPA 9050)	\$8.00 each		0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00 each		0	\$0	
TOX (EPA 9056)	\$50.00 each		0	\$0	
Chloride(EPA 9250)	\$25.00 each		0	\$0	
BOD	\$60.00 each		0	\$0	
Sulfate(EPA 300)	\$25.00 each		0	\$0	
COD	\$50.00 each		0	\$0	
pH (EPA 9045)	\$8.00 each		0	\$0	
Volatiles (EPA 524)	\$195.00 each		0	\$0	
Hardness(EPA 130.2)	\$15.00 each		0	\$0	
Alkalinity(EPA 310)	\$12.00 each		0	\$0	
Nitrate (EPA 353.2)	\$20.00 each		0	\$0	
SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS					
Volatiles (TCL)	\$180.00 each		0	\$0	
B/N/A (TCL)	\$400.00 each		0	\$0	
Pest./PCBs (TCL)	\$180.00 each		0	\$0	
Total Metals & CN(TAL)	\$170.00 each		0	\$0	
Spec Cond(EPA 9050)	\$8.00 each		0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00 each		0	\$0	
TOX (EPA 9056)	\$70.00 each		0	\$0	
Chloride(EPA 9250)	\$25.00 each		0	\$0	
pH (EPA 9045)	\$8.00 each		0	\$0	
Nitrate (EPA 353.2)	\$20.00 each		0	\$0	
Subtotal Team Laboratory				\$0	
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00 each		0	\$0	
TCLP	\$1,500.00 each		0	\$0	
Moisture Content	\$15.00 each		0	\$0	
Bulk Density	\$35.00 each		0	\$0	
Chromium (Level II)	\$30.00 each		0	\$0	
Total Suspended Solids	\$20.00 each		0	\$0	
Total Dissolved Solids	\$20.00 each		0	\$0	
Ammonia	\$25.00 each		0	\$0	
Phosphate	\$25.00 each		0	\$0	
Cation Exchange Capacity	\$100.00 each		0	\$0	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 1a
Site Visit and
Records Review

Prop No: 979002-00001

	<u>Unit</u>	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
RADIOLOGICAL LABORATORY ANALYSIS						
Water Samples For:						
Thorium 232, 230, 227	\$60.00 each			0	\$0	
Uranium 238, 235, 233+234	\$60.00 each			0	\$0	
Radium 226,223	\$40.00 each			0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00 each			0	\$0	
Plutonium 239 + 240	\$65.00 each			0	\$0	
Americium 241	\$65.00 each			0	\$0	
Gross Alpha&Beta	\$45.00 each			0	\$0	
Soil Samples For:						
Thorium 232, 230, 227	\$60.00 each			0	\$0	
Uranium 238, 235, 233+234	\$60.00 each			0	\$0	
Radium 226,223	\$40.00 each			0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00 each			0	\$0	
Plutonium 239 + 240	\$65.00 each			0	\$0	
Americium 241	\$65.00 each			0	\$0	
Gamma Spectrometry	\$0.00 each			0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00 each			0	\$0	
Sample Prep/Return	\$0.00 each			0	\$0	
Wipe Samples For:						
Thorium 232, 230, 227	\$60.00 each			0	\$0	
Uranium 238, 235, 233+234	\$60.00 each			0	\$0	
Radium 226,223	\$40.00 each			0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00 each			0	\$0	
Plutonium 239 + 240	\$65.00 each			0	\$0	
Americium 241	\$65.00 each			0	\$0	
Gross Alpha&Beta	\$45.00 each			0	\$0	
AIR SAMPLES LABORATORY ANALYSIS						
SVOC's	\$490.00 each			0	\$0	
Metals	\$150.00 each			0	\$0	
Radon (Alpha Film)	\$25.00 each			0	\$0	
Subtotal Misc. Laboratory					\$0	
INVESTIGATION SUBCONTRACTORS						
Driller	Lump Sum each			0	\$0	
Photogrammetry	Lump Sum each			0	\$0	
IDW Disposal	Lump Sum each			0	\$0	
Surveyor	Lump Sum each			0	\$0	
Subtotal Investigation Subcontractors					\$0	
Subtotal Laboratory & Investigation Subcontractors:					\$0	
3% Mark-up:					\$0	
SUBTOTAL SUBCONTRACTORS:					\$0	
					=====	
TASK TOTAL:					\$3,362	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 1b
Archaeological Investigations

Prop No: 979002-00001

	<u>Unit</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
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LABOR COSTS

ENGINEERS AND SCIENTISTS

Professional Level 6, Step 2 (P68)	\$58.74 /hour	0	\$0
Professional Level 6, Step 1 (P62)	\$46.47 /hour	0	\$0
Professional Level 5, Step 4 (P58)	\$44.11 /hour	16	\$706
Professional Level 5, Step 3 (P56)	\$37.99 /hour	0	\$0
Professional Level 5, Step 2 (P54)	\$32.91 /hour	40	\$1,316
Professional Level 5, Step 1 (P52)	\$29.39 /hour	0	\$0
Professional Level 4, Step 2 (P48)	\$29.13 /hour	260	\$7,574
Professional Level 4, Step 1 (P42)	\$25.20 /hour	0	\$0
Professional Level 3, Step 1 (P35)	\$24.04 /hour	0	\$0
Professional Level 2, Step 2 (P28)	\$23.09 /hour	0	\$0
Professional Level 2, Step 1 (P22)	\$19.89 /hour	228	\$4,535
Professional Level 1, Step 2 (P18)	\$18.57 /hour	280	\$5,200
Professional Level 1, Step 1 (P12)	\$14.84 /hour	416	\$6,173

TECHNICAL AND SUPPORT SPECIALISTS

Technician Level 5 (T55)	\$21.10 /hour	0	\$0
Technician Level 4, Step 2 (T48)	\$16.58 /hour	60	\$995
Technician Level 4, Step 1 (T42)	\$14.08 /hour	0	\$0
Technician Level 3, Step 2 (T38)	\$13.99 /hour	0	\$0
Technician Level 3, Step 1 (T32)	\$11.61 /hour	0	\$0
Technician Level 2 (T25)	\$10.13 /hour	0	\$0
Technician Level 1 (T15)	\$8.89 /hour	0	\$0
Support Level 3 (S35)	\$20.61 /hour	0	\$0
Support Level 2 (S25)	\$12.40 /hour	0	\$0
Support Level 1 (S15)	\$8.72 /hour	0	\$0

TOTAL HOURS/LABOR COST	1300	\$26,499
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Contract Year: 1

Base Yr

Overhead Rate: 143%

Labor Burden: \$37,893

SUBTOTAL BURDENED LABOR: \$64,392

Client: U.S. Army Corps of Engineers

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

Task # 1b

RI/FS at the Radiological Disposal Areas

Archaeological Investigations

SEAD-12

Annex E

Prop No: 979002-00001

	Unit			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
MATERIALS AND SUPPLIES				
Bottle labels	\$20.00 /roll		0	\$0
40 mL VOA Vials	\$122.74 /case		0	\$0
1 Liter Amber Bottles	\$37.95 /case		0	\$0
32 oz. HDPE Bottles	\$30.75 /case		0	\$0
Braided Nylon Rope	\$0.15 /foot		0	\$0
Bubble Pack	\$84.00 /roll		0	\$0
Decon Eqt	\$18.00 /kit		0	\$0
55g drums fill/mov	\$100.00 each		0	\$0
Field Notebook	\$14.00 each		5	\$70
Ice	\$1.00 /bag		0	\$0
Latex Gloves	\$10.00 /box		5	\$50
Methanol (Optima)	\$25.00 /bottle		0	\$0
Hexane (Optima)	\$25.00 /bottle		0	\$0
Acetone (Optima)	\$50.00 /bottle		0	\$0
HCl (Optima)	\$285.00 /bottle		0	\$0
HNO3 (Optima)	\$175.00 /bottle		0	\$0
Ascorbic Acid	\$10.00 /bottle		0	\$0
Filters (0.45uM & 0.5uM)	\$50.00 /box		0	\$0
Overboots	\$4.00 /pair		100	\$400
Respirator Cartridges	\$15.00 /pair		50	\$750
Packing Tape (doz)	\$72.00 /case		1	\$72
Padlocks	\$12.00 each		0	\$0
Sampling Tables	\$40.00 each		2	\$80
Radiological Badges	\$20.00 each		5	\$100
Aluminum Foil	\$1.00 /roll		10	\$10
Stain Stl bwl/spn	\$30.00 /set		0	\$0
Survey Stake/Flag	\$20.00 /bundle		5	\$100
Teflon tape	\$8.00 /roll		0	\$0
Tyveks	\$6.30 each		100	\$630
Water (HPLC Grade)	\$97.00 /case		0	\$0
Ziplock bags	\$3.00 /box		10	\$30
Calibration Gas	\$450.00 /tank		0	\$0
Ultra Pure Air	\$310.00 /ton		0	\$0
Teflon Tubing	\$120.00 /roll		0	\$0
Teflon Sheeting	\$500.00 /roll		0	\$0
Folding Live Traps	\$15.00 each		0	\$0
Glassware	\$25.00 each		0	\$0
Quartz Filters	\$10.00 each		0	\$0
Vermiculite Packing	\$16.00 /bag		0	\$0

SUBTOTAL MATLS & SUPPLIES: \$2,292

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 1b
Archaeological Investigations

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
TRAVEL					
Airfare Boston\Syracuse	\$500.00 /trip		4	\$2,000	
Airfare Boston\Huntsville	\$900.00 /trip		0	\$0	
Subsistence-Seneca	\$96.00 /day		135	\$12,960	4.5man-months
Subsistence-Huntsville	\$89.00 /day		0	\$0	
Parking,Airport	\$13.00 /day		60	\$780	
Auto Rental	\$55.00 /day		30	\$1,650	
Suburban\Van rental	\$585.00 /week		4	\$2,340	
Mileage	\$0.31 /mile		100	\$31	
SUBTOTAL TRAVEL:				\$19,761	

OTHERS

IN-HOUSE SERVICES

Telephone	\$4.00 /call	50	\$200
Word Proc/PC	\$3.70 /hour	0	\$0
CADD	\$5.00 /hour	0	\$0
Facsimile	\$1.00 /page	50	\$50
Overnight Express			
Letter/2 lb pack	\$14.50 each	0	\$0
Package (50 lbs)	\$96.25 each	10	\$963
Mail 4-lb pack	\$4.10 /pack	0	\$0
Mail letters	\$0.54 /letter	0	\$0

Subtotal Services \$1,213

REPRODUCTION

Photocopier	\$0.05 /page	5000	\$250
Aerial Photo repro	\$10.00 /photo	0	\$0
Blueline repro	\$1.00 /Sheet	0	\$0
Cronoflex Prod	\$5.50 /Sq Ft	0	\$0
3-ring binders	\$15.00 each	0	\$0
Color Copies	\$2.00 /page	0	\$0

Subtotal Reproduction \$250

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 1b
Archaeological Investigations

Prop No: 979002-00001

	<u>Unit</u>			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
<u>Notes</u>				
EQUIPMENT RENTAL				
EARTH SCIENCES EQUIPMENT				
Bailer	\$55.00 /week		0	\$0
Magnetometer	\$42.00 /day		0	\$0
pH/Cond meter	\$50.00 /week		0	\$0
Flow thru pH/Cond meter	\$257.00 /week		0	\$0
DO meter	\$55.00 /week		0	\$0
Soil Gas Supplies	\$50.00 /day		0	\$0
Slug test eqt	\$50.00 /week		0	\$0
Water level ind	\$40.00 /week		0	\$0
Turbidimeter	\$30.00 /week		0	\$0
Data Logger, Trnsdcr	\$135.00 /day		0	\$0
Flow Meter	\$30.00 /week		0	\$0
Water coolers	\$40.00 /month		1	\$40
Equipment Trailer	\$1,000.00 /month		1	\$1,000
Grundfuss Redi Flow Pump	\$64.00 /day		0	\$0
PUF Sampler	\$150.00 /week		0	\$0
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0
Hi- Vol Sampler	\$75.00 /week		4	\$300
Hi- Vol Sampler Calibration Kit	\$25.00 /day		4	\$100
Ponar Sediment Sampler	\$27.00 /day		0	\$0
3.2 kw Generator	\$50.00 /day		0	\$0
Seismograph	\$200.00 /day		0	\$0
EM-31	\$85.00 /day		0	\$0
GPR	\$500.00 /day		0	\$0
Subtotal Rental				\$1,440
HEALTH & SAFETY EQUIPMENT				
HNu Meter	\$50.00 /day		20	\$1,000
Alpha Survey Meter	\$80.00 /week		4	\$320
Alpha Scintillation Counter	\$100.00 /week		0	\$0
Beta Sample Counter	\$100.00 /week		0	\$0
Gas Proportional Detector	\$100.00 /week		0	\$0
Gas Prop. Detector-Floor	\$100.00 /week		0	\$0
Radon Monitor	\$300.00 /week		0	\$0
Gamma Radiation Meter	\$50.00 /day		4	\$200
Calib Gas	\$10.00 /day		20	\$200
2-way radios	\$15.00 /ea/wk		8	\$120
Air Purif Resp	\$20.00 /week		8	\$160
10-Gal Eye Wash	\$35.00 /week		4	\$140
Combination SCBA/SAR	\$150.00 /day		0	\$0
Subtotal H & S				\$2,140
SUBTOTAL OTHERS:				\$5,043
SUBTOTAL LABOR & ODC'S:				\$91,487

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 1b
Archaeological Investigations

Prop No: 979002-00001

	<u>Unit</u>		<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
	<u>Cost</u>	<u>Units</u>			
SUBCONTRACTORS					
GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS					
Volatiles (TCL)	\$180.00	each	0	\$0	
B/N/A (TCL)	\$400.00	each	0	\$0	
Pest./PCBs (TCL)	\$180.00	each	0	\$0	
Total Metals & CN(TAL)	\$170.00	each	0	\$0	
Iron(Ferrous)	\$30.00	each	0	\$0	
Sulfide	\$30.00	each	0	\$0	
Spec Cond(EPA 9050)	\$8.00	each	0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00	each	0	\$0	
TOX (EPA 9056)	\$50.00	each	0	\$0	
Chloride(EPA 9250)	\$25.00	each	0	\$0	
BOD	\$60.00	each	0	\$0	
Sulfate(EPA 300)	\$25.00	each	0	\$0	
COD	\$50.00	each	0	\$0	
pH (EPA 9045)	\$8.00	each	0	\$0	
Volatiles (EPA 524)	\$195.00	each	0	\$0	
Hardness(EPA 130.2)	\$15.00	each	0	\$0	
Alkalinity(EPA 310)	\$12.00	each	0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS					
Volatiles (TCL)	\$180.00	each	0	\$0	
B/N/A (TCL)	\$400.00	each	0	\$0	
Pest./PCBs (TCL)	\$180.00	each	0	\$0	
Total Metals & CN(TAL)	\$170.00	each	0	\$0	
Spec Cond(EPA 9050)	\$8.00	each	0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00	each	0	\$0	
TOX (EPA 9056)	\$70.00	each	0	\$0	
Chloride(EPA 9250)	\$25.00	each	0	\$0	
pH (EPA 9045)	\$8.00	each	0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
Subtotal Team Laboratory				\$0	
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00	each	0	\$0	
TCLP	\$1,500.00	each	0	\$0	
Moisture Content	\$15.00	each	0	\$0	
Bulk Density	\$35.00	each	0	\$0	
Chromium (Level II)	\$30.00	each	0	\$0	
Total Suspended Solids	\$20.00	each	0	\$0	
Total Dissolved Solids	\$20.00	each	0	\$0	
Ammonia	\$25.00	each	0	\$0	
Phosphate	\$25.00	each	0	\$0	
Cation Exchange Capacity	\$100.00	each	0	\$0	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 1b
Archaeological Investigations

Prop No: 979002-00001

	Unit			
	Cost	Units	Quantity	Cost
Notes				
RADIOLOGICAL LABORATORY ANALYSIS				
Water Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gross Alpha&Beta	\$45.00	each	0	\$0
Soil Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gamma Spectrometry	\$0.00	each	0	\$0
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0
Sample Prep/Return	\$0.00	each	0	\$0
Wipe Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gross Alpha&Beta	\$45.00	each	0	\$0
AIR SAMPLES LABORATORY ANALYSIS				
SVOC's	\$490.00	each	0	\$0
Metals	\$150.00	each	0	\$0
Radon (Alpha Film)	\$25.00	each	0	\$0
Subtotal Misc. Laboratory				\$0
INVESTIGATION SUBCONTRACTORS				
Driller	Lump Sum	each	0	\$0
Photogrammetry	Lump Sum	each	0	\$0
IDW Disposal	Lump Sum	each	0	\$0
Surveyor	Lump Sum	each	0	\$0
Subtotal Investigation Subcontractors				\$0
Subtotal Laboratory & Investigation Subcontractors:				\$0
3% Mark-up:				\$0
SUBTOTAL SUBCONTRACTORS:				\$0
=====				
TASK TOTAL:				\$91,487

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2
Radiological Waste Disposal Area
Field Investigations Summary
SEAD-12

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
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LABOR COSTS

ENGINEERS AND SCIENTISTS

Professional Level 6, Step 2 (P68)	\$58.74 /hour	0	\$0
Professional Level 6, Step 1 (P62)	\$46.47 /hour	0	\$0
Professional Level 5, Step 4 (P58)	\$44.11 /hour	232	\$10,234
Professional Level 5, Step 3 (P56)	\$37.99 /hour	0	\$0
Professional Level 5, Step 2 (P54)	\$32.91 /hour	216	\$7,109
Professional Level 5, Step 1 (P52)	\$29.39 /hour	40	\$1,176
Professional Level 4, Step 2 (P48)	\$29.13 /hour	1000	\$29,130
Professional Level 4, Step 1 (P42)	\$25.20 /hour	2009	\$50,627
Professional Level 3, Step 1 (P35)	\$24.04 /hour	0	\$0
Professional Level 2, Step 2 (P28)	\$23.09 /hour	90	\$2,078
Professional Level 2, Step 1 (P22)	\$19.89 /hour	1423	\$28,303
Professional Level 1, Step 2 (P18)	\$18.57 /hour	2279	\$42,321
Professional Level 1, Step 1 (P12)	\$14.84 /hour	0	\$0

TECHNICAL AND SUPPORT SPECIALISTS

Technician Level 5 (T55)	\$21.10 /hour	400	\$8,440
Technician Level 4, Step 2 (T48)	\$16.58 /hour	1595	\$26,445
Technician Level 4, Step 1 (T42)	\$14.08 /hour	0	\$0
Technician Level 3, Step 2 (T38)	\$13.99 /hour	0	\$0
Technician Level 3, Step 1 (T32)	\$11.61 /hour	0	\$0
Technician Level 2 (T25)	\$10.13 /hour	0	\$0
Technician Level 1 (T15)	\$8.89 /hour	0	\$0
Support Level 3 (S35)	\$20.61 /hour	0	\$0
Support Level 2 (S25)	\$12.40 /hour	0	\$0
Support Level 1 (S15)	\$8.72 /hour	0	\$0

TOTAL HOURS/LABOR COST

9284	\$205,862
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Contract Year: 1

Base Yr

Overhead Rate: 143%

Labor Burden: \$294,383

SUBTOTAL BURDENED LABOR: \$500,245

Client: U.S. Army Corps of Engineers
Huntsville Division

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Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
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Task # 2
Radiological Waste Disposal Area
Field Investigations Summary
SEAD-12

Prop No: 979002-00001

	<u>Unit</u>	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
MATERIALS AND SUPPLIES						
Bottle labels		\$20.00	/roll	6	\$120	
40 mL VOA Vials		\$122.74	/case	8	\$982	
1 Liter Amber Bottles		\$37.95	/case	23	\$873	
32 oz. HDPE Bottles		\$30.75	/case	11	\$338	
Braided Nylon Rope		\$0.15	/foot	500	\$75	
Bubble Pack		\$84.00	/roll	12	\$1,008	
Decon Eqt		\$18.00	/kit	12	\$216	
55g drums fill/mov		\$100.00	each	0	\$0	
Field Notebook		\$14.00	each	22	\$308	
Ice		\$1.00	/bag	100	\$100	
Latex Gloves		\$10.00	/box	35	\$350	
Methanol (Optima)		\$25.00	/bottle	7	\$175	
Hexane (Optima)		\$25.00	/bottle	2	\$50	
Acetone (Optima)		\$50.00	/bottle	2	\$100	
HCl (Optima)		\$285.00	/bottle	5	\$1,425	
HNO3 (Optima)		\$175.00	/bottle	5	\$875	
Ascorbic Acid		\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)		\$50.00	/box	0	\$0	
Overboots		\$4.00	/pair	783	\$3,132	
Respirator Cartridges		\$15.00	/pair	168	\$2,520	
Packing Tape (doz)		\$72.00	/case	6	\$432	
Padlocks		\$12.00	each	0	\$0	
Sampling Tables		\$40.00	each	11	\$440	
Radiological Badges		\$20.00	each	29	\$580	
Aluminum Foil		\$1.00	/roll	0	\$0	
Stain Stl bwl/spn		\$30.00	/set	16	\$480	
Survey Stake/Flag		\$20.00	/bundle	41	\$820	
Teflon tape		\$8.00	/roll	0	\$0	
Tyveks		\$6.30	each	789	\$4,971	
Water (HPLC Grade)		\$97.00	/case	31	\$3,007	
Ziplock bags		\$3.00	/box	3	\$9	
Calibration Gas		\$450.00	/tank	0	\$0	
Ultra Pure Air		\$310.00	/ton	0	\$0	
Teflon Tubing		\$120.00	/roll	0	\$0	
Teflon Sheeting		\$500.00	/roll	0	\$0	
Folding Live Traps		\$15.00	each	10	\$150	
Glassware		\$25.00	each	0	\$0	
Quartz Filters		\$10.00	each	0	\$0	
Vermiculite Packing		\$16.00	/bag	86	\$1,376	
SUBTOTAL MATLS & SUPPLIES:					\$24,912	

Client: U.S. Army Corps of Engineers
Huntsville Division

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Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2
Radiological Waste Disposal Area
Field Investigations Summary
SEAD-12

Prop No: 979002-00001

	<u>Unit</u>			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
				<u>Notes</u>
TRAVEL				
Airfare Boston\Syracuse	\$500.00 /trip		33	\$16,500
Airfare Boston\Huntsville	\$900.00 /trip		0	\$0
Subsistence-Seneca	\$96.00 /day		745	\$71,520
Subsistence-Huntsville	\$89.00 /day		0	\$0
Parking,Airport	\$13.00 /day		658	\$8,554
Auto Rental	\$55.00 /day		338	\$18,590
Suburban\Van rental	\$585.00 /week		36.5	\$21,353
Mileage	\$0.31 /mile		2600	\$806
SUBTOTAL TRAVEL:				\$137,323

OTHERS

IN-HOUSE SERVICES

Telephone	\$4.00 /call	450	\$1,800
Word Proc/PC	\$3.70 /hour	0	\$0
CADD	\$5.00 /hour	0	\$0
Facsimile	\$1.00 /page	750	\$750
Overnight Express			
Letter/2 lb pack	\$14.50 each	5	\$73
Package (50 lbs)	\$96.25 each	136	\$13,090
Mail 4-lb pack	\$4.10 /pack	0	\$0
Mail letters	\$0.54 /letter	0	\$0

Subtotal Services \$15,713

REPRODUCTION

Photocopier	\$0.05 /page	7500	\$375
Aerial Photo repro	\$10.00 /photo	10	\$100
Blueline repro	\$1.00 /Sheet	0	\$0
Cronoflex Prod	\$5.50 /Sq Ft	0	\$0
3-ring binders	\$15.00 each	0	\$0
Color Copies	\$2.00 /page	0	\$0

Subtotal Reproduction \$475

Client: U.S. Army Corps of Engineers
Huntsville Division

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RI/FS at the Radiological Disposal Areas
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Task # 2
Radiological Waste Disposal Area
Field Investigations Summary
SEAD-12

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00 /week		16	\$880	
Magnetometer	\$42.00 /week		0	\$0	
pH/Cond meter	\$50.00 /week		5	\$250	
Flow thru pH/Cond meter	\$257.00 /week		4	\$1,028	
DO meter	\$55.00 /week		5	\$275	
Soil Gas Supplies	\$50.00 /day		8	\$400	
Slug test eqt	\$50.00 /week		2	\$100	
Water level ind	\$40.00 /week		8	\$320	
Turbidimeter	\$30.00 /week		4	\$120	
Data Logger, Trnsdcr	\$135.00 /day		2	\$270	
Flow Meter	\$30.00 /week		2	\$60	
Water coolers	\$40.00 /month		10.5	\$420	
Equipment Trailer	\$1,000.00 /month		10.5	\$10,500	
Grundfos Redi Flow Pump	\$64.00 /day		37	\$2,368	
PUF Sampler	\$150.00 /week		0	\$0	
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0	
Hi- Vol Sampler	\$75.00 /week		2	\$150	
Hi- Vol Sampler Calibration Kit	\$25.00 /day		10	\$250	
Ponar Sediment Sampler	\$27.00 /day		11	\$297	
3.2 kw Generator	\$50.00 /day		37	\$1,850	
Seismograph	\$200.00 /day		5	\$1,000	
EM-31	\$85.00 /day		150	\$12,750	
GPR	\$500.00 /day		15	\$7,500	
Subtotal Rental				\$40,788	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00 /day		399	\$19,950	
Alpha Survey Meter	\$80.00 /week		296	\$23,680	
Alpha Scintillation Counter	\$100.00 /week		9	\$900	
Beta Sample Counter	\$100.00 /week		9	\$900	
Gas Proportional Detector	\$100.00 /week		9	\$900	
Gas Prop. Detector-Floor	\$100.00 /week		8	\$800	
Radon Monitor	\$300.00 /week		2	\$600	
Gamma Radiation Meter	\$50.00 /day		368	\$18,400	
Calib Gas	\$10.00 /day		372	\$3,720	
2-way radios	\$15.00 /ea/wk		66	\$990	
Air Purif Resp	\$20.00 /week		28	\$560	
10-Gal Eye Wash	\$35.00 /week		45	\$1,575	
Combination SCBA/SAR	\$150.00 /day		0	\$0	
Subtotal H & S				\$72,975	
SUBTOTAL OTHERS:				\$129,951	
SUBTOTAL LABOR & ODC'S:				\$792,430	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2
Radiological Waste Disposal Area
Field Investigations Summary
SEAD-12

Prop No: 979002-00001

	Unit			
	Cost	Units	Quantity	Cost
Notes				
SUBCONTRACTORS				
GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS				
Volatiles (TCL)	\$180.00	each	0	\$0
B/N/A (TCL)	\$400.00	each	160	\$64,000
Pest./PCBs (TCL)	\$180.00	each	160	\$28,800
Total Metals & CN(TAL)	\$170.00	each	160	\$27,200
Iron(Ferrous)	\$30.00	each	74	\$2,220
Sulfide	\$30.00	each	74	\$2,220
Spec Cond(EPA 9050)	\$8.00	each	0	\$0
Total Organic Carbon (EPA 9060)	\$25.00	each	117	\$2,925
TOX (EPA 9056)	\$50.00	each	0	\$0
Chloride(EPA 9250)	\$25.00	each	0	\$0
BOD	\$60.00	each	74	\$4,440
Sulfate(EPA 300)	\$25.00	each	74	\$1,850
COD	\$50.00	each	74	\$3,700
pH (EPA 9045)	\$8.00	each	0	\$0
Volatiles (EPA 524)	\$195.00	each	226	\$44,070
Hardness(EPA 130.2)	\$15.00	each	117	\$1,755
Alkalinity(EPA 310)	\$12.00	each	117	\$1,404
Nitrate (EPA 353.2)	\$20.00	each	117	\$2,340
SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS				
Volatiles (TCL)	\$180.00	each	306	\$55,080
B/N/A (TCL)	\$400.00	each	306	\$122,400
Pest./PCBs (TCL)	\$180.00	each	306	\$55,080
Total Metals & CN(TAL)	\$170.00	each	306	\$52,020
Spec Cond(EPA 9050)	\$8.00	each	0	\$0
Total Organic Carbon (L. Kahn)	\$60.00	each	55	\$3,300
TOX (EPA 9056)	\$70.00	each	0	\$0
Chloride(EPA 9250)	\$25.00	each	0	\$0
pH (EPA 9045)	\$8.00	each	55	\$440
Nitrate (EPA 353.2)	\$20.00	each	306	\$6,120
Subtotal Team Laboratory				\$481,364
MISC. LABORATORY ANALYSIS				
Grain Size Dist	\$120.00	each	55	\$6,600
TCLP	\$1,500.00	each	12	\$18,000
Moisture Content	\$15.00	each	0	\$0
Bulk Density	\$35.00	each	15	\$525
Chromium (Level II)	\$30.00	each	0	\$0
Total Suspended Solids	\$20.00	each	43	\$860
Total Dissolved Solids	\$20.00	each	117	\$2,340
Ammonia	\$25.00	each	43	\$1,075
Phosphate	\$25.00	each	43	\$1,075
Cation Exchange Capacity	\$100.00	each	55	\$5,500

Client: U.S. Army Corps of Engineers
Huntsville Division

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Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2
Radiological Waste Disposal Area
Field Investigations Summary
SEAD-12

Prop No: 979002-00001

	Unit			
	Cost	Units	Quantity	Cost
Notes				
RADIOLOGICAL LABORATORY ANALYSIS				
Water Samples For:				
Thorium 232, 230, 227	\$60.00	each	157	\$9,420
Uranium 238, 235, 233+234	\$60.00	each	157	\$9,420
Radium 226,223	\$40.00	each	157	\$6,280
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	157	\$12,560
Plutonium 239 + 240	\$65.00	each	157	\$10,205
Americium 241	\$65.00	each	157	\$10,205
Gross Alpha&Beta	\$45.00	each	157	\$7,065
Soil Samples For:				
Thorium 232, 230, 227	\$60.00	each	399	\$23,940
Uranium 238, 235, 233+234	\$60.00	each	399	\$23,940
Radium 226,223	\$40.00	each	399	\$15,960
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	399	\$0
Plutonium 239 + 240	\$65.00	each	399	\$25,935
Americium 241	\$65.00	each	399	\$25,935
Gamma Spectrometry	\$0.00	each	0	\$0
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	8	\$6,000
Sample Prep/Return	\$0.00	each	399	\$0
Wipe Samples For:				
Thorium 232, 230, 227	\$60.00	each	134	\$8,040
Uranium 238, 235, 233+234	\$60.00	each	134	\$8,040
Radium 226,223	\$40.00	each	134	\$5,360
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	134	\$10,720
Plutonium 239 + 240	\$65.00	each	134	\$8,710
Americium 241	\$65.00	each	134	\$8,710
Gross Alpha&Beta	\$45.00	each	134	\$6,030
AIR SAMPLES LABORATORY ANALYSIS				
SVOC's	\$490.00	each	0	\$0
Metals	\$150.00	each	0	\$0
Radon (Alpha Film)	\$25.00	each	100	\$2,500
Subtotal Misc. Laboratory				\$280,950
INVESTIGATION SUBCONTRACTORS				
Driller	Lump Sum	each	50515	\$50,515
Photogrammetry	Lump Sum	each	31600	\$31,600
IDW Disposal	Lump Sum	each	9990	\$9,990
Surveyor	Lump Sum	each	32758	\$32,758
Subtotal Investigation Subcontractors				\$124,863
Subtotal Laboratory & Investigation Subcontractors:				\$887,177
3% Mark-up:				\$26,615
SUBTOTAL SUBCONTRACTORS:				\$913,792
=====				
TASK TOTAL: \$1,706,222				

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.1
Geophysical Investigations
714,000ft EM-31@6000ft/dy-1 man
71,000 ft GPR @ 2000 ft/dy-2 men
8 Seismic Lines

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74 /hour		0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47 /hour		0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11 /hour		80	\$3,529	
Professional Level 5, Step 3 (P56)	\$37.99 /hour		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91 /hour		0	\$0	
Professional Level 5, Step 1 (P52)	\$29.39 /hour		0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13 /hour		1000	\$29,130	
Professional Level 4, Step 1 (P42)	\$25.20 /hour		0	\$0	
Professional Level 3, Step 1 (P35)	\$24.04 /hour		0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09 /hour		0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89 /hour		0	\$0	
Professional Level 1, Step 2 (P18)	\$18.57 /hour		400	\$7,428	
Professional Level 1, Step 1 (P12)	\$14.84 /hour		0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10 /hour		400	\$8,440	
Technician Level 4, Step 2 (T48)	\$16.58 /hour		0	\$0	
Technician Level 4, Step 1 (T42)	\$14.08 /hour		0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99 /hour		0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61 /hour		0	\$0	
Technician Level 2 (T25)	\$10.13 /hour		0	\$0	
Technician Level 1 (T15)	\$8.89 /hour		0	\$0	
Support Level 3 (S35)	\$20.61 /hour		0	\$0	
Support Level 2 (S25)	\$12.40 /hour		0	\$0	
Support Level 1 (S15)	\$8.72 /hour		0	\$0	
TOTAL HOURS/LABOR COST			1880	\$48,527	
Contract Year:	1				
Base Yr					
Overhead Rate:	143%				
Labor Burden:				\$69,393	
SUBTOTAL BURDENED LABOR:				\$117,920	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.1
Geophysical Investigations
714,000ft EM-31@6000ft/dy-1 man
71,000 ft GPR @ 2000 ft/dy-2 men
8 Seismic Lines

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00 /roll		0	\$0	
40 mL VOA Vials	\$122.74 /case		0	\$0	
1 Liter Amber Bottles	\$37.95 /case		0	\$0	
32 oz. HDPE Bottles	\$30.75 /case		0	\$0	
Braided Nylon Rope	\$0.15 /foot		0	\$0	
Bubble Pack	\$84.00 /roll		0	\$0	
Decon Eqt	\$18.00 /kit		0	\$0	
55g drums fill/mov	\$100.00 each		0	\$0	
Field Notebook	\$14.00 each		6	\$84	
Ice	\$1.00 /bag		0	\$0	
Latex Gloves	\$10.00 /box		12	\$120	
Methanol (Optima)	\$25.00 /bottle		0	\$0	
Hexane (Optima)	\$25.00 /bottle		0	\$0	
Acetone (Optima)	\$50.00 /bottle		0	\$0	
HCl (Optima)	\$285.00 /bottle		0	\$0	
HNO3 (Optima)	\$175.00 /bottle		0	\$0	
Ascorbic Acid	\$10.00 /bottle		0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00 /box		0	\$0	
Overboots	\$4.00 /pair		150	\$600	
Respirator Cartridges	\$15.00 /pair		15	\$225	
Packing Tape (doz)	\$72.00 /case		0	\$0	
Padlocks	\$12.00 each		0	\$0	
Sampling Tables	\$40.00 each		0	\$0	
Radiological Badges	\$20.00 each		5	\$100	
Aluminum Foil	\$1.00 /roll		0	\$0	
Stain Stl bwl/spn	\$30.00 /set		0	\$0	
Survey Stake/Flag	\$20.00 /bundle		12	\$240	
Teflon tape	\$8.00 /roll		0	\$0	
Tyveks	\$6.30 each		150	\$945	
Water (HPLC Grade)	\$97.00 /case		0	\$0	
Ziplock bags	\$3.00 /box		0	\$0	
Calibration Gas	\$450.00 /tank		0	\$0	
Ultra Pure Air	\$310.00 /ton		0	\$0	
Teflon Tubing	\$120.00 /roll		0	\$0	
Teflon Sheeting	\$500.00 /roll		0	\$0	
Folding Live Traps	\$15.00 each		0	\$0	
Glassware	\$25.00 each		0	\$0	
Quartz Filters	\$10.00 each		0	\$0	
Vermiculite Packing	\$16.00 /bag		0	\$0	

SUBTOTAL MATLS & SUPPLIES: \$2,314

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.1
Geophysical Investigations
714,000ft EM-31@6000ft/dy-1 man
71,000 ft GPR @ 2000 ft/dy-2 men
8 Seismic Lines

Prop No: 979002-00001

	<u>Unit</u>	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
TRAVEL						
Airfare Boston\Syracuse	\$500.00 /trip			6	\$3,000	6@1Ft
Airfare Boston\Huntsville	\$900.00 /trip			0	\$0	
Subsistence-Seneca	\$96.00 /day			190	\$18,240	190 days total
Subsistence-Huntsville	\$89.00 /day			0	\$0	
Parking,Airport	\$13.00 /day			360	\$4,680	
Auto Rental	\$55.00 /day			190	\$10,450	190 days total
Suburban\Van rental	\$585.00 /week			6	\$3,510	6 weeks
Mileage	\$0.31 /mile			1000	\$310	
SUBTOTAL TRAVEL:					\$40,190	

OTHERS

IN-HOUSE SERVICES

Telephone	\$4.00 /call	200	\$800
Word Proc/PC	\$3.70 /hour	0	\$0
CADD	\$5.00 /hour	0	\$0
Facsimile	\$1.00 /page	200	\$200
Overnight Express			
Letter/2 lb pack	\$14.50 each	5	\$73
Package (50 lbs)	\$96.25 each	0	\$0
Mail 4-lb pack	\$4.10 /pack	0	\$0
Mail letters	\$0.54 /letter	0	\$0

Subtotal Services \$1,073

REPRODUCTION

Photocopier	\$0.05 /page	1000	\$50
Aerial Photo repro	\$10.00 /photo	0	\$0
Blueline repro	\$1.00 /Sheet	0	\$0
Cronoflex Prod	\$5.50 /Sq Ft	0	\$0
3-ring binders	\$15.00 each	0	\$0
Color Copies	\$2.00 /page	0	\$0

Subtotal Reproduction \$50

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.1
Geophysical Investigations
714,000ft EM-31@6000ft/dy-1 man
71,000 ft GPR @ 2000 ft/dy-2 men
8 Seismic Lines

Prop No: 979002-00001

	<u>Unit</u>	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
EQUIPMENT RENTAL						
EARTH SCIENCES EQUIPMENT						
Bailer	\$55.00 /week			0	\$0	
Magnetometer	\$42.00 /week			0	\$0	
pH/Cond meter	\$50.00 /week			0	\$0	
Flow thru pH/Cond meter	\$257.00 /week			0	\$0	
DO meter	\$55.00 /week			0	\$0	
Soil Gas Supplies	\$50.00 /day			0	\$0	
Slug test eqt	\$50.00 /week			0	\$0	
Water level ind	\$40.00 /week			0	\$0	
Turbidimeter	\$30.00 /week			0	\$0	
Data Logger, Trnsdcr	\$135.00 /day			0	\$0	
Flow Meter	\$30.00 /week			0	\$0	
Water coolers	\$40.00 /month			3	\$120	
Equipment Trailer	\$1,000.00 /month			3	\$3,000	
Grundfus Redi Flow Pump	\$64.00 /day			0	\$0	
PUF Sampler	\$150.00 /week			0	\$0	
PUF Sampler Calibration Kit	\$25.00 /day			0	\$0	
Hi- Vol Sampler	\$75.00 /week			0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00 /day			0	\$0	
Ponar Sediment Sampler	\$27.00 /day			0	\$0	
3.2 kw Generator	\$50.00 /day			0	\$0	
Seismograph	\$200.00 /day			5	\$1,000	
EM-31	\$85.00 /day			150	\$12,750	5 units x 3 crews
GPR	\$500.00 /day			15	\$7,500	15 days field

Subtotal Rental \$24,370

HEALTH & SAFETY EQUIPMENT

HNu Meter	\$50.00 /day	190	\$9,500
Alpha Survey Meter	\$80.00 /week	190	\$15,200
Alpha Scintillation Counter	\$100.00 /week	0	\$0
Beta Sample Counter	\$100.00 /week	0	\$0
Gas Proportional Detector	\$100.00 /week	0	\$0
Gas Prop. Detector-Floor	\$100.00 /week	0	\$0
Radon Monitor	\$300.00 /week	0	\$0
Gamma Radiation Meter	\$50.00 /day	190	\$9,500
Calib Gas	\$10.00 /day	190	\$1,900
2-way radios	\$15.00 /ea/wk	6	\$90
Air Purif Resp	\$20.00 /week	12	\$240
10-Gal Eye Wash	\$35.00 /week	12	\$420
Combination SCBA/SAR	\$150.00 /day	0	\$0

Subtotal H & S \$36,850

SUBTOTAL OTHERS: \$62,343

SUBTOTAL LABOR & ODC'S: \$222,767

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.1
Geophysical Investigations
714,000ft EM-31@6000ft/dy-1 man
71,000 ft GPR @ 2000 ft/dy-2 men
8 Seismic Lines

Prop No: 979002-00001

Unit				
Cost	Units	Quantity	Cost	Notes

SUBCONTRACTORS

GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Iron(Ferrous)	\$30.00 each	0	\$0
Sulfide	\$30.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (EPA 9060)	\$25.00 each	0	\$0
TOX (EPA 9056)	\$50.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
BOD	\$60.00 each	0	\$0
Sulfate(EPA 300)	\$25.00 each	0	\$0
COD	\$50.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Volatiles (EPA 524)	\$195.00 each	0	\$0
Hardness(EPA 130.2)	\$15.00 each	0	\$0
Alkalinity(EPA 310)	\$12.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (L. Kahn)	\$60.00 each	0	\$0
TOX (EPA 9056)	\$70.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

Subtotal Team Laboratory	\$0
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MISC. LABORATORY ANALYSIS

Grain Size Dist	\$120.00 each	0	\$0
TCLP	\$1,500.00 each	0	\$0
Moisture Content	\$15.00 each	0	\$0
Bulk Density	\$35.00 each	0	\$0
Chromium (Level II)	\$30.00 each	0	\$0
Total Suspended Solids	\$20.00 each	0	\$0
Total Dissolved Solids	\$20.00 each	0	\$0
Ammonia	\$25.00 each	0	\$0
Phosphate	\$25.00 each	0	\$0
Cation Exchange Capacity	\$100.00 each	0	\$0

Client: U.S. Army Corps of Engineers
Huntsville Division

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Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.1
Geophysical Investigations
714,000ft EM-31@6000ft/dy-1 man
71,000 ft GPR @ 2000 ft/dy-2 men
8 Seismic Lines

Prop No: 979002-00001

	Unit			
	Cost	Units	Quantity	Cost
Notes				
RADIOLOGICAL LABORATORY ANALYSIS				
Water Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gross Alpha&Beta	\$45.00	each	0	\$0
Soil Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gamma Spectrometry	\$0.00	each	0	\$0
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0
Sample Prep/Return	\$0.00	each	0	\$0
Wipe Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gross Alpha&Beta	\$45.00	each	0	\$0
AIR SAMPLES LABORATORY ANALYSIS				
SVOC's	\$490.00	each	0	\$0
Metals	\$150.00	each	0	\$0
Radon (Alpha Film)	\$25.00	each	0	\$0
Subtotal Misc. Laboratory				\$0
INVESTIGATION SUBCONTRACTORS				
Driller	Lump Sum	each	0	\$0
Photogrammetry	Lump Sum	each	0	\$0
IDW Disposal	Lump Sum	each	0	\$0
Surveyor	Lump Sum	each	0	\$0
Subtotal Investigation Subcontractors				\$0
Subtotal Laboratory & Investigation Subcontractors:				\$0
3% Mark-up:				\$0
SUBTOTAL SUBCONTRACTORS:				\$0

TASK TOTAL: \$222,767

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.2
Soil Gas Investigation
120 @15/dy=8dy

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74 /hour		0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47 /hour		0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11 /hour		8	\$353	
Professional Level 5, Step 3 (P56)	\$37.99 /hour		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91 /hour		0	\$0	
Professional Level 5, Step 1 (P52)	\$29.39 /hour		40	\$1,176	
Professional Level 4, Step 2 (P48)	\$29.13 /hour		0	\$0	
Professional Level 4, Step 1 (P42)	\$25.20 /hour		0	\$0	
Professional Level 3, Step 1 (P35)	\$24.04 /hour		0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09 /hour		0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89 /hour		100	\$1,989	
Professional Level 1, Step 2 (P18)	\$18.57 /hour		0	\$0	
Professional Level 1, Step 1 (P12)	\$14.84 /hour		0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10 /hour		0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58 /hour		100	\$1,658	
Technician Level 4, Step 1 (T42)	\$14.08 /hour		0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99 /hour		0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61 /hour		0	\$0	
Technician Level 2 (T25)	\$10.13 /hour		0	\$0	
Technician Level 1 (T15)	\$8.89 /hour		0	\$0	
Support Level 3 (S35)	\$20.61 /hour		0	\$0	
Support Level 2 (S25)	\$12.40 /hour		0	\$0	
Support Level 1 (S15)	\$8.72 /hour		0	\$0	
TOTAL HOURS/LABOR COST			248	\$5,175	
Contract Year:	1				
Base Yr					
Overhead Rate:	143%				
Labor Burden:				\$7,401	
SUBTOTAL BURDENED LABOR:				\$12,576	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.2
Soil Gas Investigation
120 @15/dy=8dy

Prop No: 979002-00001

	Unit			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
MATERIALS AND SUPPLIES				
Bottle labels	\$20.00 /roll		0	\$0
40 mL VOA Vials	\$122.74 /case		0	\$0
1 Liter Amber Bottles	\$37.95 /case		0	\$0
32 oz. HDPE Bottles	\$30.75 /case		0	\$0
Braided Nylon Rope	\$0.15 /foot		0	\$0
Bubble Pack	\$84.00 /roll		0	\$0
Decon Eqt	\$18.00 /kit		0	\$0
55g drums fill/mov	\$100.00 each		0	\$0
Field Notebook	\$14.00 each		0	\$0
Ice	\$1.00 /bag		0	\$0
Latex Gloves	\$10.00 /box		1	\$10
Methanol (Optima)	\$25.00 /bottle		0	\$0
Hexane (Optima)	\$25.00 /bottle		0	\$0
Acetone (Optima)	\$50.00 /bottle		0	\$0
HCl (Optima)	\$285.00 /bottle		0	\$0
HNO3 (Optima)	\$175.00 /bottle		0	\$0
Ascorbic Acid	\$10.00 /bottle		0	\$0
Filters (0.45uM & 0.5uM)	\$50.00 /box		0	\$0
Overboots	\$4.00 /pair		16	\$64
Respirator Cartridges	\$15.00 /pair		16	\$240
Packing Tape (doz)	\$72.00 /case		0	\$0
Padlocks	\$12.00 each		0	\$0
Sampling Tables	\$40.00 each		1	\$40
Radiological Badges	\$20.00 each		2	\$40
Aluminum Foil	\$1.00 /roll		0	\$0
Stain Stl bwl/spn	\$30.00 /set		0	\$0
Survey Stake/Flag	\$20.00 /bundle		4	\$80
Teflon tape	\$8.00 /roll		0	\$0
Tyveks	\$6.30 each		16	\$101
Water (HPLC Grade)	\$97.00 /case		0	\$0
Ziplock bags	\$3.00 /box		0	\$0
Calibration Gas	\$450.00 /tank		0	\$0
Ultra Pure Air	\$310.00 /ton		0	\$0
Teflon Tubing	\$120.00 /roll		0	\$0
Teflon Sheeting	\$500.00 /roll		0	\$0
Folding Live Traps	\$15.00 each		0	\$0
Glassware	\$25.00 each		0	\$0
Quartz Filters	\$10.00 each		0	\$0
Vermiculite Packing	\$16.00 /bag		0	\$0

SUBTOTAL MATLS & SUPPLIES: \$575

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.2
Soil Gas Investigation
120 @15/dy=8dy

Prop No: 979002-00001

	<u>Unit</u>			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
<u>Notes</u>				
TRAVEL				
Airfare Boston\Syracuse	\$500.00 /trip		0	\$0
Airfare Boston\Huntsville	\$900.00 /trip		0	\$0
Subsistence-Seneca	\$96.00 /day		16	\$1,536
Subsistence-Huntsville	\$89.00 /day		0	\$0
Parking,Airport	\$13.00 /day		0	\$0
Auto Rental	\$55.00 /day		0	\$0
Suburban\Van rental	\$585.00 /week		2	\$1,170
Mileage	\$0.31 /mile		0	\$0
SUBTOTAL TRAVEL:				\$2,706

OTHERS

IN-HOUSE SERVICES

Telephone	\$4.00 /call	10	\$40
Word Proc/PC	\$3.70 /hour	0	\$0
CADD	\$5.00 /hour	0	\$0
Facsimile	\$1.00 /page	10	\$10
Overnight Express			
Letter/2 lb pack	\$14.50 each	0	\$0
Package (50 lbs)	\$96.25 each	0	\$0
Mail 4-lb pack	\$4.10 /pack	0	\$0
Mail letters	\$0.54 /letter	0	\$0

Subtotal Services \$50

REPRODUCTION

Photocopier	\$0.05 /page	500	\$25
Aerial Photo repro	\$10.00 /photo	0	\$0
Blueline repro	\$1.00 /Sheet	0	\$0
Cronoflex Prod	\$5.50 /Sq Ft	0	\$0
3-ring binders	\$15.00 each	0	\$0
Color Copies	\$2.00 /page	0	\$0

Subtotal Reproduction \$25

Client: U.S. Army Corps of Engineers

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

Task # 2.2

RI/FS at the Radiological Disposal Areas

Soil Gas Investigation

SEAD-12

120 @15/dy=8dy

Annex E

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00 /week		0	\$0	
Magnetometer	\$42.00 /week		0	\$0	
pH/Cond meter	\$50.00 /week		0	\$0	
Flow thru pH/Cond meter	\$257.00 /week		0	\$0	
DO meter	\$55.00 /week		0	\$0	
Soil Gas Supplies	\$50.00 /day		8	\$400	
Slug test eqt	\$50.00 /week		0	\$0	
Water level ind	\$40.00 /week		0	\$0	
Turbidimeter	\$30.00 /week		0	\$0	
Data Logger, Trnsdcr	\$135.00 /day		0	\$0	
Flow Meter	\$30.00 /week		0	\$0	
Water coolers	\$40.00 /month		0.5	\$20	
Equipment Trailer	\$1,000.00 /month		0.5	\$500	
Grundfus Redi Flow Pump	\$64.00 /day		0	\$0	
PUF Sampler	\$150.00 /week		0	\$0	
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0	
Hi- Vol Sampler	\$75.00 /week		0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00 /day		0	\$0	
Ponar Sediment Sampler	\$27.00 /day		0	\$0	
3.2 kw Generator	\$50.00 /day		0	\$0	
Seismograph	\$200.00 /day		0	\$0	
EM-31	\$85.00 /day		0	\$0	
GPR	\$500.00 /day		0	\$0	
Subtotal Rental				\$920	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00 /day		16	\$800	
Alpha Survey Meter	\$80.00 /week		16	\$1,280	
Alpha Scintillation Counter	\$100.00 /week		0	\$0	
Beta Sample Counter	\$100.00 /week		0	\$0	
Gas Proportional Detector	\$100.00 /week		0	\$0	
Gas Prop. Detector-Floor	\$100.00 /week		0	\$0	
Radon Monitor	\$300.00 /week		2	\$600	
Gamma Radiation Meter	\$50.00 /day		16	\$800	
Calib Gas	\$10.00 /day		16	\$160	
2-way radios	\$15.00 /ea/wk		2	\$30	
Air Purif Resp	\$20.00 /week		4	\$80	
10-Gal Eye Wash	\$35.00 /week		2	\$70	
Combination SCBA/SAR	\$150.00 /day		0	\$0	
Subtotal H & S				\$3,820	
SUBTOTAL OTHERS:				\$4,815	
SUBTOTAL LABOR & ODC'S:				\$20,672	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.2
Soil Gas Investigation
120 @15/dy=8dy

Prop No: 979002-00001

	Unit			
	Cost	Units	Quantity	Cost
SUBCONTRACTORS				
GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS				
Volatiles (TCL)	\$180.00 each		0	\$0
B/N/A (TCL)	\$400.00 each		0	\$0
Pest./PCBs (TCL)	\$180.00 each		0	\$0
Total Metals & CN(TAL)	\$170.00 each		0	\$0
Iron(Ferrous)	\$30.00 each		0	\$0
Sulfide	\$30.00 each		0	\$0
Spec Cond(EPA 9050)	\$8.00 each		0	\$0
Total Organic Carbon (EPA 9060)	\$25.00 each		0	\$0
TOX (EPA 9056)	\$50.00 each		0	\$0
Chloride(EPA 9250)	\$25.00 each		0	\$0
BOD	\$60.00 each		0	\$0
Sulfate(EPA 300)	\$25.00 each		0	\$0
COD	\$50.00 each		0	\$0
pH (EPA 9045)	\$8.00 each		0	\$0
Volatiles (EPA 524)	\$195.00 each		0	\$0
Hardness(EPA 130.2)	\$15.00 each		0	\$0
Alkalinity(EPA 310)	\$12.00 each		0	\$0
Nitrate (EPA 353.2)	\$20.00 each		0	\$0
SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS				
Volatiles (TCL)	\$180.00 each		0	\$0
B/N/A (TCL)	\$400.00 each		0	\$0
Pest./PCBs (TCL)	\$180.00 each		0	\$0
Total Metals & CN(TAL)	\$170.00 each		0	\$0
Spec Cond(EPA 9050)	\$8.00 each		0	\$0
Total Organic Carbon (L. Kahn)	\$60.00 each		0	\$0
TOX (EPA 9056)	\$70.00 each		0	\$0
Chloride(EPA 9250)	\$25.00 each		0	\$0
pH (EPA 9045)	\$8.00 each		0	\$0
Nitrate (EPA 353.2)	\$20.00 each		0	\$0
Subtotal Team Laboratory				\$0
MISC. LABORATORY ANALYSIS				
Grain Size Dist	\$120.00 each		0	\$0
TCLP	\$1,500.00 each		0	\$0
Moisture Content	\$15.00 each		0	\$0
Bulk Density	\$35.00 each		0	\$0
Chromium (Level II)	\$30.00 each		0	\$0
Total Suspended Solids	\$20.00 each		0	\$0
Total Dissolved Solids	\$20.00 each		0	\$0
Ammonia	\$25.00 each		0	\$0
Phosphate	\$25.00 each		0	\$0
Cation Exchange Capacity	\$100.00 each		0	\$0

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.2
Soil Gas Investigation
120 @15/dy=8dy

Prop No: 979002-00001

	<u>Unit</u>	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
RADIOLOGICAL LABORATORY ANALYSIS						
Water Samples For:						
Thorium 232, 230, 227		\$60.00	each	0	\$0	
Uranium 238, 235, 233+234		\$60.00	each	0	\$0	
Radium 226,223		\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60		\$80.00	each	0	\$0	
Plutonium 239 + 240		\$65.00	each	0	\$0	
Americium 241		\$65.00	each	0	\$0	
Gross Alpha&Beta		\$45.00	each	0	\$0	
Soil Samples For:						
Thorium 232, 230, 227		\$60.00	each	0	\$0	
Uranium 238, 235, 233+234		\$60.00	each	0	\$0	
Radium 226,223		\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60		\$0.00	each	0	\$0	
Plutonium 239 + 240		\$65.00	each	0	\$0	
Americium 241		\$65.00	each	0	\$0	
Gamma Spectrometry		\$0.00	each	0	\$0	
Dist. Coef.(ASTM D:4319-83)		\$750.00	each	0	\$0	
Sample Prep/Return		\$0.00	each	0	\$0	
Wipe Samples For:						
Thorium 232, 230, 227		\$60.00	each	0	\$0	
Uranium 238, 235, 233+234		\$60.00	each	0	\$0	
Radium 226,223		\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60		\$80.00	each	0	\$0	
Plutonium 239 + 240		\$65.00	each	0	\$0	
Americium 241		\$65.00	each	0	\$0	
Gross Alpha&Beta		\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSIS						
SVOC's		\$490.00	each	0	\$0	
Metals		\$150.00	each	0	\$0	
Radon (Alpha Film)		\$25.00	each	0	\$0	
Subtotal Misc. Laboratory					\$0	
INVESTIGATION SUBCONTRACTORS						
Driller	Lump Sum	each		6776	\$6,776	
Photogrammetry	Lump Sum	each		0	\$0	
IDW Disposal	Lump Sum	each		0	\$0	
Surveyor	Lump Sum	each		0	\$0	
Subtotal Investigation Subcontractors					\$6,776	
Subtotal Laboratory & Investigation Subcontractors:					\$6,776	
3% Mark-up:					\$203	
SUBTOTAL SUBCONTRACTORS:					\$6,979	
					=====	
TASK TOTAL:					\$27,651	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3
Radiological Investigations Summary

Prop No: 979002-00001

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74 /hour		0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47 /hour		0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11 /hour		60	\$2,647	
Professional Level 5, Step 3 (P56)	\$37.99 /hour		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91 /hour		120	\$3,949	
Professional Level 5, Step 1 (P52)	\$29.39 /hour		0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13 /hour		0	\$0	
Professional Level 4, Step 1 (P42)	\$25.20 /hour		684	\$17,237	
Professional Level 3, Step 1 (P35)	\$24.04 /hour		0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09 /hour		0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89 /hour		0	\$0	
Professional Level 1, Step 2 (P18)	\$18.57 /hour		684	\$12,702	
Professional Level 1, Step 1 (P12)	\$14.84 /hour		0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10 /hour		0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58 /hour		300	\$4,974	
Technician Level 4, Step 1 (T42)	\$14.08 /hour		0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99 /hour		0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61 /hour		0	\$0	
Technician Level 2 (T25)	\$10.13 /hour		0	\$0	
Technician Level 1 (T15)	\$8.89 /hour		0	\$0	
Support Level 3 (S35)	\$20.61 /hour		0	\$0	
Support Level 2 (S25)	\$12.40 /hour		0	\$0	
Support Level 1 (S15)	\$8.72 /hour		0	\$0	
TOTAL HOURS/LABOR COST			1848	\$41,508	
Contract Year:	1				
Base Yr					
Overhead Rate:	143%				
Labor Burden:				\$59,357	
SUBTOTAL BURDENED LABOR:				\$100,866	

Client: U.S. Army Corps of Engineers
Huntsville Division

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Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
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Task # 2.3
Radiological Investigations Summary

Prop No: 979002-00001

	<u>Unit</u>	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
MATERIALS AND SUPPLIES						
Bottle labels		\$20.00	/roll	1	\$20	
40 mL VOA Vials		\$122.74	/case	0	\$0	
1 Liter Amber Bottles		\$37.95	/case	6	\$228	
32 oz. HDPE Bottles		\$30.75	/case	6	\$185	
Braided Nylon Rope		\$0.15	/foot	500	\$75	
Bubble Pack		\$84.00	/roll	6	\$504	
Decon Eqt		\$18.00	/kit	6	\$108	
55g drums fill/mov		\$100.00	each	0	\$0	
Field Notebook		\$14.00	each	9	\$126	
Ice		\$1.00	/bag	20	\$20	
Latex Gloves		\$10.00	/box	14	\$140	
Methanol (Optima)		\$25.00	/bottle	1	\$25	
Hexane (Optima)		\$25.00	/bottle	1	\$25	
Acetone (Optima)		\$50.00	/bottle	1	\$50	
HCl (Optima)		\$285.00	/bottle	1	\$285	
HNO3 (Optima)		\$175.00	/bottle	1	\$175	
Ascorbic Acid		\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)		\$50.00	/box	0	\$0	
Overboots		\$4.00	/pair	236	\$944	
Respirator Cartridges		\$15.00	/pair	5	\$75	
Packing Tape (doz)		\$72.00	/case	3	\$216	
Padlocks		\$12.00	each	0	\$0	
Sampling Tables		\$40.00	each	7	\$280	
Radiological Badges		\$20.00	each	16	\$320	
Aluminum Foil		\$1.00	/roll	0	\$0	
Stain Stl bwl/spn		\$30.00	/set	12	\$360	
Survey Stake/Flag		\$20.00	/bundle	17	\$340	
Teflon tape		\$8.00	/roll	0	\$0	
Tyveks		\$6.30	each	242	\$1,525	
Water (HPLC Grade)		\$97.00	/case	2	\$194	
Ziplock bags		\$3.00	/box	0	\$0	
Calibration Gas		\$450.00	/tank	0	\$0	
Ultra Pure Air		\$310.00	/ton	0	\$0	
Teflon Tubing		\$120.00	/roll	0	\$0	
Teflon Sheeting		\$500.00	/roll	0	\$0	
Folding Live Traps		\$15.00	each	0	\$0	
Glassware		\$25.00	each	0	\$0	
Quartz Filters		\$10.00	each	0	\$0	
Vermiculite Packing		\$16.00	/bag	8	\$128	
SUBTOTAL MATLS & SUPPLIES:					\$6,347	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3
Radiological Investigations Summary

Prop No: 979002-00001

	<u>Unit</u>			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
TRAVEL				
Airfare Boston\Syracuse	\$500.00	/trip	15	\$7,500
Airfare Boston\Huntsville	\$900.00	/trip	0	\$0
Subsistence-Seneca	\$96.00	/day	176	\$16,896
Subsistence-Huntsville	\$89.00	/day	0	\$0
Parking,Airport	\$13.00	/day	116	\$1,508
Auto Rental	\$55.00	/day	24	\$1,320
Suburban\Van rental	\$585.00	/week	12	\$7,020
Mileage	\$0.31	/mile	900	\$279
SUBTOTAL TRAVEL:				\$34,523

OTHERS

IN-HOUSE SERVICES

Telephone	\$4.00	/call	120	\$480
Word Proc/PC	\$3.70	/hour	0	\$0
CADD	\$5.00	/hour	0	\$0
Facsimile	\$1.00	/page	300	\$300
Overnight Express				
Letter/2 lb pack	\$14.50	each	0	\$0
Package (50 lbs)	\$96.25	each	48	\$4,620
Mail 4-lb pack	\$4.10	/pack	0	\$0
Mail letters	\$0.54	/letter	0	\$0

Subtotal Services \$5,400

REPRODUCTION

Photocopier	\$0.05	/page	3000	\$150
Aerial Photo repro	\$10.00	/photo	0	\$0
Blueline repro	\$1.00	/Sheet	0	\$0
Cronoflex Prod	\$5.50	/Sq Ft	0	\$0
3-ring binders	\$15.00	each	0	\$0
Color Copies	\$2.00	/page	0	\$0

Subtotal Reproduction \$150

Client: U.S. Army Corps of Engineers
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RI/FS at the Radiological Disposal Areas
SEAD-12
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Task # 2.3
Radiological Investigations Summary

Prop No: 979002-00001

	<u>Unit</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00 /week		0	\$0	
Magnetometer	\$42.00 /week		0	\$0	
pH/Cond meter	\$50.00 /week		0	\$0	
Flow thru pH/Cond meter	\$257.00 /week		0	\$0	
DO meter	\$55.00 /week		0	\$0	
Soil Gas Supplies	\$50.00 /day		0	\$0	
Slug test eqt	\$50.00 /week		0	\$0	
Water level ind	\$40.00 /week		0	\$0	
Turbidimeter	\$30.00 /week		0	\$0	
Data Logger, Trnsdcr	\$135.00 /day		0	\$0	
Flow Meter	\$30.00 /week		0	\$0	
Water coolers	\$40.00 /month		3	\$120	
Equipment Trailer	\$1,000.00 /month		3	\$3,000	
Grundfus Redi Flow Pump	\$64.00 /day		0	\$0	
PUF Sampler	\$150.00 /week		0	\$0	
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0	
Hi- Vol Sampler	\$75.00 /week		0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00 /day		0	\$0	
Ponar Sediment Sampler	\$27.00 /day		0	\$0	
3.2 kw Generator	\$50.00 /day		0	\$0	
Seismograph	\$200.00 /day		0	\$0	
EM-31	\$85.00 /day		0	\$0	
GPR	\$500.00 /day		0	\$0	

Subtotal Rental \$3,120

HEALTH & SAFETY EQUIPMENT

HNu Meter	\$50.00 /day	65	\$3,250
Alpha Survey Meter	\$80.00 /week	9	\$720
Alpha Scintillation Counter	\$100.00 /week	9	\$900
Beta Sample Counter	\$100.00 /week	9	\$900
Gas Proportional Detector	\$100.00 /week	9	\$900
Gas Prop. Detector-Floor	\$100.00 /week	8	\$800
Radon Monitor	\$300.00 /week	0	\$0
Gamma Radiation Meter	\$50.00 /day	43	\$2,150
Calib Gas	\$10.00 /day	38	\$380
2-way radios	\$15.00 /ea/wk	28	\$420
Air Purif Resp	\$20.00 /week	0	\$0
10-Gal Eye Wash	\$35.00 /week	14	\$490
Combination SCBA/SAR	\$150.00 /day	0	\$0

Subtotal H & S \$10,910

SUBTOTAL OTHERS: \$19,580

SUBTOTAL LABOR & ODC'S: \$161,315

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3
Radiological Investigations Summary

Prop No: 979002-00001

	<u>Unit</u>			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
<u>Notes</u>				
SUBCONTRACTORS				
GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS				
Volatiles (TCL)	\$180.00 each		0	\$0
B/N/A (TCL)	\$400.00 each		0	\$0
Pest./PCBs (TCL)	\$180.00 each		0	\$0
Total Metals & CN(TAL)	\$170.00 each		0	\$0
Iron(Ferrous)	\$30.00 each		0	\$0
Sulfide	\$30.00 each		0	\$0
Spec Cond(EPA 9050)	\$8.00 each		0	\$0
Total Organic Carbon (EPA 9060)	\$25.00 each		0	\$0
TOX (EPA 9056)	\$50.00 each		0	\$0
Chloride(EPA 9250)	\$25.00 each		0	\$0
BOD	\$60.00 each		0	\$0
Sulfate(EPA 300)	\$25.00 each		0	\$0
COD	\$50.00 each		0	\$0
pH (EPA 9045)	\$8.00 each		0	\$0
Volatiles (EPA 524)	\$195.00 each		0	\$0
Hardness(EPA 130.2)	\$15.00 each		0	\$0
Alkalinity(EPA 310)	\$12.00 each		0	\$0
Nitrate (EPA 353.2)	\$20.00 each		0	\$0
SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS				
Volatiles (TCL)	\$180.00 each		0	\$0
B/N/A (TCL)	\$400.00 each		0	\$0
Pest./PCBs (TCL)	\$180.00 each		0	\$0
Total Metals & CN(TAL)	\$170.00 each		0	\$0
Spec Cond(EPA 9050)	\$8.00 each		0	\$0
Total Organic Carbon (L. Kahn)	\$60.00 each		0	\$0
TOX (EPA 9056)	\$70.00 each		0	\$0
Chloride(EPA 9250)	\$25.00 each		0	\$0
pH (EPA 9045)	\$8.00 each		0	\$0
Nitrate (EPA 353.2)	\$20.00 each		0	\$0
Subtotal Team Laboratory				\$0
MISC. LABORATORY ANALYSIS				
Grain Size Dist	\$120.00 each		0	\$0
TCLP	\$1,500.00 each		0	\$0
Moisture Content	\$15.00 each		0	\$0
Bulk Density	\$35.00 each		0	\$0
Chromium (Level II)	\$30.00 each		0	\$0
Total Suspended Solids	\$20.00 each		0	\$0
Total Dissolved Solids	\$20.00 each		0	\$0
Ammonia	\$25.00 each		0	\$0
Phosphate	\$25.00 each		0	\$0
Cation Exchange Capacity	\$100.00 each		0	\$0

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3
Radiological Investigations Summary

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
RADIOLOGICAL LABORATORY ANALYSIS					
Water Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross Alpha&Beta	\$45.00	each	0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gamma Spectrometry	\$0.00	each	0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross Alpha&Beta	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subtotal Misc. Laboratory				\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	0	\$0	
Photogrammetry	Lump Sum	each	0	\$0	
IDW Disposal	Lump Sum	each	0	\$0	
Surveyor	Lump Sum	each	0	\$0	
Subtotal Investigation Subcontractors				\$0	
Subtotal Laboratory & Investigation Subcontractors:				\$0	
3% Mark-up:				\$0	
SUBTOTAL SUBCONTRACTORS:				\$0	
=====					
TASK TOTAL:				\$161,315	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3.1
Alpha, Beta, Gamma Screening
Alpha FI76m/h W18m/h
Beta/Gamma FI&W 162m/h
Ext. Beta/Gamma 260m/h

Prop No: 979002-00001

	Unit			
	Cost	Units	Quantity	Cost
				Notes

LABOR COSTS

ENGINEERS AND SCIENTISTS

Professional Level 6, Step 2 (P68)	\$58.74 /hour	0	\$0
Professional Level 6, Step 1 (P62)	\$46.47 /hour	0	\$0
Professional Level 5, Step 4 (P58)	\$44.11 /hour	20	\$882
Professional Level 5, Step 3 (P56)	\$37.99 /hour	0	\$0
Professional Level 5, Step 2 (P54)	\$32.91 /hour	80	\$2,633
Professional Level 5, Step 1 (P52)	\$29.39 /hour	0	\$0
Professional Level 4, Step 2 (P48)	\$29.13 /hour	0	\$0
Professional Level 4, Step 1 (P42)	\$25.20 /hour	300	\$7,560
Professional Level 3, Step 1 (P35)	\$24.04 /hour	0	\$0
Professional Level 2, Step 2 (P28)	\$23.09 /hour	0	\$0
Professional Level 2, Step 1 (P22)	\$19.89 /hour	0	\$0
Professional Level 1, Step 2 (P18)	\$18.57 /hour	300	\$5,571
Professional Level 1, Step 1 (P12)	\$14.84 /hour	0	\$0

TECHNICAL AND SUPPORT SPECIALISTS

Technician Level 5 (T55)	\$21.10 /hour	0	\$0
Technician Level 4, Step 2 (T48)	\$16.58 /hour	300	\$4,974
Technician Level 4, Step 1 (T42)	\$14.08 /hour	0	\$0
Technician Level 3, Step 2 (T38)	\$13.99 /hour	0	\$0
Technician Level 3, Step 1 (T32)	\$11.61 /hour	0	\$0
Technician Level 2 (T25)	\$10.13 /hour	0	\$0
Technician Level 1 (T15)	\$8.89 /hour	0	\$0
Support Level 3 (S35)	\$20.61 /hour	0	\$0
Support Level 2 (S25)	\$12.40 /hour	0	\$0
Support Level 1 (S15)	\$8.72 /hour	0	\$0

TOTAL HOURS/LABOR COST	1000	\$21,620
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Contract Year: 1

Base Yr

Overhead Rate: 143%

Labor Burden: \$30,917

SUBTOTAL BURDENED LABOR: \$52,537

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3.1
Alpha, Beta, Gamma Screening
Alpha FI76m/h W18m/h
Beta/Gamma FI&W 162m/h
Ext. Beta/Gamma 260m/h

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00 /roll		0	\$0	
40 mL VOA Vials	\$122.74 /case		0	\$0	
1 Liter Amber Bottles	\$37.95 /case		0	\$0	
32 oz. HDPE Bottles	\$30.75 /case		0	\$0	
Braided Nylon Rope	\$0.15 /foot		500	\$75	
Bubble Pack	\$84.00 /roll		1	\$84	
Decon Eq	\$18.00 /kit		1	\$18	
55g drums fill/mov	\$100.00 each		0	\$0	
Field Notebook	\$14.00 each		4	\$56	
Ice	\$1.00 /bag		0	\$0	
Latex Gloves	\$10.00 /box		4	\$40	
Methanol (Optima)	\$25.00 /bottle		0	\$0	
Hexane (Optima)	\$25.00 /bottle		0	\$0	
Acetone (Optima)	\$50.00 /bottle		0	\$0	
HCl (Optima)	\$285.00 /bottle		0	\$0	
HNO3 (Optima)	\$175.00 /bottle		0	\$0	
Ascorbic Acid	\$10.00 /bottle		0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00 /box		0	\$0	
Overboots	\$4.00 /pair		160	\$640	
Respirator Cartridges	\$15.00 /pair		1	\$15	
Packing Tape (doz)	\$72.00 /case		1	\$72	
Padlocks	\$12.00 each		0	\$0	
Sampling Tables	\$40.00 each		2	\$80	
Radiological Badges	\$20.00 each		4	\$80	
Aluminum Foil	\$1.00 /roll		0	\$0	
Stain Stl bwl/spn	\$30.00 /set		0	\$0	
Survey Stake/Flag	\$20.00 /bundle		10	\$200	
Teflon tape	\$8.00 /roll		0	\$0	
Tyveks	\$6.30 each		160	\$1,008	
Water (HPLC Grade)	\$97.00 /case		0	\$0	
Ziplock bags	\$3.00 /box		0	\$0	
Calibration Gas	\$450.00 /tank		0	\$0	
Ultra Pure Air	\$310.00 /ton		0	\$0	
Teflon Tubing	\$120.00 /roll		0	\$0	
Teflon Sheeting	\$500.00 /roll		0	\$0	
Folding Live Traps	\$15.00 each		0	\$0	
Glassware	\$25.00 each		0	\$0	
Quartz Filters	\$10.00 each		0	\$0	
Vermiculite Packing	\$16.00 /bag		0	\$0	

SUBTOTAL MATLS & SUPPLIES: \$2,368

Client: U.S. Army Corps of Engineers
Huntsville Division

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SEAD-12
Annex E

Task # 2.3.1
Alpha, Beta, Gamma Screening
Alpha FI76m/h W18m/h
Beta/Gamma FI&W 162m/h
Ext. Beta/Gamma 260m/h

Prop No: 979002-00001

	<u>Unit</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
TRAVEL					
Airfare Boston\Syracuse	\$500.00 /trip		3	\$1,500	
Airfare Boston\Huntsville	\$900.00 /trip		0	\$0	
Subsistence-Seneca	\$96.00 /day		90	\$8,640	3@30days
Subsistence-Huntsville	\$89.00 /day		0	\$0	
Parking,Airport	\$13.00 /day		30	\$390	
Auto Rental	\$55.00 /day		0	\$0	
Suburban\Van rental	\$585.00 /week		6	\$3,510	
Mileage	\$0.31 /mile		150	\$47	

SUBTOTAL TRAVEL: \$14,087

OTHERS

IN-HOUSE SERVICES

Telephone	\$4.00 /call	20	\$80
Word Proc/PC	\$3.70 /hour	0	\$0
CADD	\$5.00 /hour	0	\$0
Facsimile	\$1.00 /page	50	\$50
Overnight Express			
Letter/2 lb pack	\$14.50 each	0	\$0
Package (50 lbs)	\$96.25 each	8	\$770
Mail 4-lb pack	\$4.10 /pack	0	\$0
Mail letters	\$0.54 /letter	0	\$0

Subtotal Services \$900

REPRODUCTION

Photocopier	\$0.05 /page	500	\$25
Aerial Photo repro	\$10.00 /photo	0	\$0
Blueline repro	\$1.00 /Sheet	0	\$0
Cronoflex Prod	\$5.50 /Sq Ft	0	\$0
3-ring binders	\$15.00 each	0	\$0
Color Copies	\$2.00 /page	0	\$0

Subtotal Reproduction \$25

Client: U.S. Army Corps of Engineers
Huntsville Division

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Task # 2.3.1
Alpha, Beta, Gamma Screening
Alpha FI76m/h W18m/h
Beta/Gamma FI&W 162m/h
Ext. Beta/Gamma 260m/h

Prop No: 979002-00001

	<u>Unit</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00 /week		0	\$0	
Magnetometer	\$42.00 /week		0	\$0	
pH/Cond meter	\$50.00 /week		0	\$0	
Flow thru pH/Cond meter	\$257.00 /week		0	\$0	
DO meter	\$55.00 /week		0	\$0	
Soil Gas Supplies	\$50.00 /day		0	\$0	
Slug test eqt	\$50.00 /week		0	\$0	
Water level ind	\$40.00 /week		0	\$0	
Turbidimeter	\$30.00 /week		0	\$0	
Data Logger, Trnsdcr	\$135.00 /day		0	\$0	
Flow Meter	\$30.00 /week		0	\$0	
Water coolers	\$40.00 /month		0.5	\$20	
Equipment Trailer	\$1,000.00 /month		0.5	\$500	
Grundfuss Redi Flow Pump	\$64.00 /day		0	\$0	
PUF Sampler	\$150.00 /week		0	\$0	
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0	
Hi- Vol Sampler	\$75.00 /week		0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00 /day		0	\$0	
Ponar Sediment Sampler	\$27.00 /day		0	\$0	
3.2 kw Generator	\$50.00 /day		0	\$0	
Seismograph	\$200.00 /day		0	\$0	
EM-31	\$85.00 /day		0	\$0	
GPR	\$500.00 /day		0	\$0	

Subtotal Rental \$520

HEALTH & SAFETY EQUIPMENT

HNu Meter	\$50.00 /day	30	\$1,500
Alpha Survey Meter	\$80.00 /week	6	\$480
Alpha Scintillation Counter	\$100.00 /week	6	\$600
Beta Sample Counter	\$100.00 /week	6	\$600
Gas Proportional Detector	\$100.00 /week	6	\$600
Gas Prop. Detector-Floor	\$100.00 /week	6	\$600
Radon Monitor	\$300.00 /week	0	\$0
Gamma Radiation Meter	\$50.00 /day	30	\$1,500
Calib Gas	\$10.00 /day	30	\$300
2-way radios	\$15.00 /ea/wk	12	\$180
Air Purif Resp	\$20.00 /week	0	\$0
10-Gal Eye Wash	\$35.00 /week	6	\$210
Combination SCBA/SAR	\$150.00 /day	0	\$0

Subtotal H & S \$6,570

SUBTOTAL OTHERS: \$8,015

SUBTOTAL LABOR & ODC'S: \$77,006

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

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RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3.1
Alpha, Beta, Gamma Screening
Alpha FI76m/h W18m/h
Beta/Gamma FI&W 162m/h
Ext. Beta/Gamma 260m/h

Prop No: 979002-00001

	Unit				
	Cost	Units	Quantity	Cost	Notes

SUBCONTRACTORS

GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Iron(Ferrous)	\$30.00 each	0	\$0
Sulfide	\$30.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (EPA 9060)	\$25.00 each	0	\$0
TOX (EPA 9056)	\$50.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
BOD	\$60.00 each	0	\$0
Sulfate(EPA 300)	\$25.00 each	0	\$0
COD	\$50.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Volatiles (EPA 524)	\$195.00 each	0	\$0
Hardness(EPA 130.2)	\$15.00 each	0	\$0
Alkalinity(EPA 310)	\$12.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (L. Kahn)	\$60.00 each	0	\$0
TOX (EPA 9056)	\$70.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

Subtotal Team Laboratory	\$0
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MISC. LABORATORY ANALYSIS

Grain Size Dist	\$120.00 each	0	\$0
TCLP	\$1,500.00 each	0	\$0
Moisture Content	\$15.00 each	0	\$0
Bulk Density	\$35.00 each	0	\$0
Chromium (Level II)	\$30.00 each	0	\$0
Total Suspended Solids	\$20.00 each	0	\$0
Total Dissolved Solids	\$20.00 each	0	\$0
Ammonia	\$25.00 each	0	\$0
Phosphate	\$25.00 each	0	\$0
Cation Exchange Capacity	\$100.00 each	0	\$0

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Alpha, Beta, Gamma Screening
Alpha FI76m/h W18m/h
Beta/Gamma FI&W 162m/h
Ext. Beta/Gamma 260m/h

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
RADIOLOGICAL LABORATORY ANALYSIS					
Water Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross Alpha&Beta	\$45.00	each	0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gamma Spectrometry	\$0.00	each	0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross Alpha&Beta	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subtotal Misc. Laboratory				\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	0	\$0	
Photogrammetry	Lump Sum	each	0	\$0	
IDW Disposal	Lump Sum	each	0	\$0	
Surveyor	Lump Sum	each	0	\$0	
Subtotal Investigation Subcontractors				\$0	
Subtotal Laboratory & Investigation Subcontractors:				\$0	
3% Mark-up:				\$0	
SUBTOTAL SUBCONTRACTORS:				\$0	
TASK TOTAL:				\$77,006	

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SEAD-12
Annex E

Task # 2.3.2
Alpha, Beta, Gamma
Direct Measurements
Affected 120/dy
Unaffected 100/dy

Prop No: 979002-00001

	<u>Unit</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
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LABOR COSTS

ENGINEERS AND SCIENTISTS

Professional Level 6, Step 2 (P68)	\$58.74 /hour	0	\$0
Professional Level 6, Step 1 (P62)	\$46.47 /hour	0	\$0
Professional Level 5, Step 4 (P58)	\$44.11 /hour	8	\$353
Professional Level 5, Step 3 (P56)	\$37.99 /hour	0	\$0
Professional Level 5, Step 2 (P54)	\$32.91 /hour	8	\$263
Professional Level 5, Step 1 (P52)	\$29.39 /hour	0	\$0
Professional Level 4, Step 2 (P48)	\$29.13 /hour	0	\$0
Professional Level 4, Step 1 (P42)	\$25.20 /hour	90	\$2,268
Professional Level 3, Step 1 (P35)	\$24.04 /hour	0	\$0
Professional Level 2, Step 2 (P28)	\$23.09 /hour	0	\$0
Professional Level 2, Step 1 (P22)	\$19.89 /hour	0	\$0
Professional Level 1, Step 2 (P18)	\$18.57 /hour	90	\$1,671
Professional Level 1, Step 1 (P12)	\$14.84 /hour	0	\$0

TECHNICAL AND SUPPORT SPECIALISTS

Technician Level 5 (T55)	\$21.10 /hour	0	\$0
Technician Level 4, Step 2 (T48)	\$16.58 /hour	0	\$0
Technician Level 4, Step 1 (T42)	\$14.08 /hour	0	\$0
Technician Level 3, Step 2 (T38)	\$13.99 /hour	0	\$0
Technician Level 3, Step 1 (T32)	\$11.61 /hour	0	\$0
Technician Level 2 (T25)	\$10.13 /hour	0	\$0
Technician Level 1 (T15)	\$8.89 /hour	0	\$0
Support Level 3 (S35)	\$20.61 /hour	0	\$0
Support Level 2 (S25)	\$12.40 /hour	0	\$0
Support Level 1 (S15)	\$8.72 /hour	0	\$0

TOTAL HOURS/LABOR COST	196	\$4,555
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Contract Year: 1

Base Yr

Overhead Rate: 143%

Labor Burden: \$6,514

SUBTOTAL BURDENED LABOR: \$11,070

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Alpha, Beta, Gamma
Direct Measurements
Affected 120/dy
Unaffected 100/dy

Prop No: 979002-00001

	<u>Unit</u>			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
MATERIALS AND SUPPLIES				
Bottle labels	\$20.00	/roll	0	\$0
40 mL VOA Vials	\$122.74	/case	0	\$0
1 Liter Amber Bottles	\$37.95	/case	0	\$0
32 oz. HDPE Bottles	\$30.75	/case	0	\$0
Braided Nylon Rope	\$0.15	/foot	0	\$0
Bubble Pack	\$84.00	/roll	1	\$84
Decon Eqt	\$18.00	/kit	1	\$18
55g drums fill/mov	\$100.00	each	0	\$0
Field Notebook	\$14.00	each	1	\$14
Ice	\$1.00	/bag	0	\$0
Latex Gloves	\$10.00	/box	2	\$20
Methanol (Optima)	\$25.00	/bottle	0	\$0
Hexane (Optima)	\$25.00	/bottle	0	\$0
Acetone (Optima)	\$50.00	/bottle	0	\$0
HCl (Optima)	\$285.00	/bottle	0	\$0
HNO3 (Optima)	\$175.00	/bottle	0	\$0
Ascorbic Acid	\$10.00	/bottle	0	\$0
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0
Overboots	\$4.00	/pair	18	\$72
Respirator Cartridges	\$15.00	/pair	0	\$0
Packing Tape (doz)	\$72.00	/case	0	\$0
Padlocks	\$12.00	each	0	\$0
Sampling Tables	\$40.00	each	1	\$40
Radiological Badges	\$20.00	each	2	\$40
Aluminum Foil	\$1.00	/roll	0	\$0
Stain Stl bwl/spn	\$30.00	/set	0	\$0
Survey Stake/Flag	\$20.00	/bundle	2	\$40
Teflon tape	\$8.00	/roll	0	\$0
Tyveks	\$6.30	each	24	\$151
Water (HPLC Grade)	\$97.00	/case	0	\$0
Ziplock bags	\$3.00	/box	0	\$0
Calibration Gas	\$450.00	/tank	0	\$0
Ultra Pure Air	\$310.00	/ton	0	\$0
Teflon Tubing	\$120.00	/roll	0	\$0
Teflon Sheeting	\$500.00	/roll	0	\$0
Folding Live Traps	\$15.00	each	0	\$0
Glassware	\$25.00	each	0	\$0
Quartz Filters	\$10.00	each	0	\$0
Vermiculite Packing	\$16.00	/bag	0	\$0

SUBTOTAL MATLS & SUPPLIES: \$479

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Huntsville Division

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Alpha, Beta, Gamma
Direct Measurements
Affected 120/dy
Unaffected 100/dy

Prop No: 979002-00001

	Unit			
	Cost	Units	Quantity	Cost
TRAVEL				
Airfare Boston\Syracuse	\$500.00 /trip		2	\$1,000
Airfare Boston\Huntsville	\$900.00 /trip		0	\$0
Subsistence-Seneca	\$96.00 /day		24	\$2,304
Subsistence-Huntsville	\$89.00 /day		0	\$0
Parking,Airport	\$13.00 /day		24	\$312
Auto Rental	\$55.00 /day		8	\$440
Suburban\Van rental	\$585.00 /week		2	\$1,170
Mileage	\$0.31 /mile		150	\$47
SUBTOTAL TRAVEL:				\$5,273

OTHERS

IN-HOUSE SERVICES

Telephone	\$4.00 /call	20	\$80
Word Proc/PC	\$3.70 /hour	0	\$0
CADD	\$5.00 /hour	0	\$0
Facsimile	\$1.00 /page	50	\$50
Overnight Express			
Letter/2 lb pack	\$14.50 each	0	\$0
Package (50 lbs)	\$96.25 each	8	\$770
Mail 4-lb pack	\$4.10 /pack	0	\$0
Mail letters	\$0.54 /letter	0	\$0

Subtotal Services \$900

REPRODUCTION

Photocopier	\$0.05 /page	500	\$25
Aerial Photo repro	\$10.00 /photo	0	\$0
Blueline repro	\$1.00 /Sheet	0	\$0
Cronoflex Prod	\$5.50 /Sq Ft	0	\$0
3-ring binders	\$15.00 each	0	\$0
Color Copies	\$2.00 /page	0	\$0

Subtotal Reproduction \$25

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Direct Measurements
Affected 120/dy
Unaffected 100/dy

Prop No: 979002-00001

	<u>Unit</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00 /week		0	\$0	
Magnetometer	\$42.00 /week		0	\$0	
pH/Cond meter	\$50.00 /week		0	\$0	
Flow thru pH/Cond meter	\$257.00 /week		0	\$0	
DO meter	\$55.00 /week		0	\$0	
Soil Gas Supplies	\$50.00 /day		0	\$0	
Slug test eqt	\$50.00 /week		0	\$0	
Water level ind	\$40.00 /week		0	\$0	
Turbidimeter	\$30.00 /week		0	\$0	
Data Logger, Trnsdcr	\$135.00 /day		0	\$0	
Flow Meter	\$30.00 /week		0	\$0	
Water coolers	\$40.00 /month		0.5	\$20	
Equipment Trailer	\$1,000.00 /month		0.5	\$500	
Grundfus Redi Flow Pump	\$64.00 /day		0	\$0	
PUF Sampler	\$150.00 /week		0	\$0	
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0	
Hi- Vol Sampler	\$75.00 /week		0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00 /day		0	\$0	
Ponar Sediment Sampler	\$27.00 /day		0	\$0	
3.2 kw Generator	\$50.00 /day		0	\$0	
Seismograph	\$200.00 /day		0	\$0	
EM-31	\$85.00 /day		0	\$0	
GPR	\$500.00 /day		0	\$0	
Subtotal Rental				\$520	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00 /day		5	\$250	
Alpha Survey Meter	\$80.00 /week		2	\$160	
Alpha Scintillation Counter	\$100.00 /week		0	\$0	
Beta Sample Counter	\$100.00 /week		0	\$0	
Gas Proportional Detector	\$100.00 /week		2	\$200	
Gas Prop. Detector-Floor	\$100.00 /week		2	\$200	
Radon Monitor	\$300.00 /week		0	\$0	
Gamma Radiation Meter	\$50.00 /day		0	\$0	
Calib Gas	\$10.00 /day		8	\$80	
2-way radios	\$15.00 /ea/wk		4	\$60	
Air Purif Resp	\$20.00 /week		0	\$0	
10-Gal Eye Wash	\$35.00 /week		2	\$70	
Combination SCBA/SAR	\$150.00 /day		0	\$0	
Subtotal H & S				\$1,020	
SUBTOTAL OTHERS:				\$2,465	
SUBTOTAL LABOR & ODC'S:				\$19,286	

Client: U.S. Army Corps of Engineers
Huntsville Division

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RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Prop No: 979002-00001

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Task # 2.3.2
Alpha, Beta, Gamma
Direct Measurements
Affected 120/dy
Unaffected 100/dy

	Unit				
	Cost	Units	Quantity	Cost	Notes

SUBCONTRACTORS

GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Iron(Ferrous)	\$30.00 each	0	\$0
Sulfide	\$30.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (EPA 9060)	\$25.00 each	0	\$0
TOX (EPA 9056)	\$50.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
BOD	\$60.00 each	0	\$0
Sulfate(EPA 300)	\$25.00 each	0	\$0
COD	\$50.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Volatiles (EPA 524)	\$195.00 each	0	\$0
Hardness(EPA 130.2)	\$15.00 each	0	\$0
Alkalinity(EPA 310)	\$12.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (L. Kahn)	\$60.00 each	0	\$0
TOX (EPA 9056)	\$70.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

Subtotal Team Laboratory	\$0
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MISC. LABORATORY ANALYSIS

Grain Size Dist	\$120.00 each	0	\$0
TCLP	\$1,500.00 each	0	\$0
Moisture Content	\$15.00 each	0	\$0
Bulk Density	\$35.00 each	0	\$0
Chromium (Level II)	\$30.00 each	0	\$0
Total Suspended Solids	\$20.00 each	0	\$0
Total Dissolved Solids	\$20.00 each	0	\$0
Ammonia	\$25.00 each	0	\$0
Phosphate	\$25.00 each	0	\$0
Cation Exchange Capacity	\$100.00 each	0	\$0

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3.2
Alpha, Beta, Gamma
Direct Measurements
Affected 120/dy
Unaffected 100/dy

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
RADIOLOGICAL LABORATORY ANALYSIS					
Water Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross Alpha&Beta	\$45.00	each	0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gamma Spectrometry	\$0.00	each	0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross Alpha&Beta	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subtotal Misc. Laboratory				\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	0	\$0	
Photogrammetry	Lump Sum	each	0	\$0	
IDW Disposal	Lump Sum	each	0	\$0	
Surveyor	Lump Sum	each	0	\$0	
Subtotal Investigation Subcontractors				\$0	
Subtotal Laboratory & Investigation Subcontractors:				\$0	
3% Mark-up:				\$0	
SUBTOTAL SUBCONTRACTORS:				\$0	
TASK TOTAL:				\$19,286	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3.3
Performance of Exposure
Rate Surveys
70/dy x 12.4dy = 870measurements

Prop No: 979002-00001

	<u>Unit</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74 /hour		0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47 /hour		0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11 /hour		8	\$353	
Professional Level 5, Step 3 (P56)	\$37.99 /hour		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91 /hour		8	\$263	
Professional Level 5, Step 1 (P52)	\$29.39 /hour		0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13 /hour		0	\$0	
Professional Level 4, Step 1 (P42)	\$25.20 /hour		124	\$3,125	
Professional Level 3, Step 1 (P35)	\$24.04 /hour		0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09 /hour		0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89 /hour		0	\$0	
Professional Level 1, Step 2 (P18)	\$18.57 /hour		124	\$2,303	
Professional Level 1, Step 1 (P12)	\$14.84 /hour		0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10 /hour		0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58 /hour		0	\$0	
Technician Level 4, Step 1 (T42)	\$14.08 /hour		0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99 /hour		0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61 /hour		0	\$0	
Technician Level 2 (T25)	\$10.13 /hour		0	\$0	
Technician Level 1 (T15)	\$8.89 /hour		0	\$0	
Support Level 3 (S35)	\$20.61 /hour		0	\$0	
Support Level 2 (S25)	\$12.40 /hour		0	\$0	
Support Level 1 (S15)	\$8.72 /hour		0	\$0	
TOTAL HOURS/LABOR COST			264	\$6,044	
Contract Year:	1				
Base Yr					
Overhead Rate:	143%				
Labor Burden:				\$8,642	
SUBTOTAL BURDENED LABOR:				\$14,686	

Client: U.S. Army Corps of Engineers
Huntsville Division

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Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3.3
Performance of Exposure
Rate Surveys
70/dy x 12.4dy = 870measurements

Prop No: 979002-00001

	Unit			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
MATERIALS AND SUPPLIES				
Bottle labels	\$20.00 /roll		0	\$0
40 mL VOA Vials	\$122.74 /case		0	\$0
1 Liter Amber Bottles	\$37.95 /case		0	\$0
32 oz. HDPE Bottles	\$30.75 /case		0	\$0
Braided Nylon Rope	\$0.15 /foot		0	\$0
Bubble Pack	\$84.00 /roll		1	\$84
Decon Eqt	\$18.00 /kit		1	\$18
55g drums fill/mov	\$100.00 each		0	\$0
Field Notebook	\$14.00 each		1	\$14
Ice	\$1.00 /bag		0	\$0
Latex Gloves	\$10.00 /box		2	\$20
Methanol (Optima)	\$25.00 /bottle		0	\$0
Hexane (Optima)	\$25.00 /bottle		0	\$0
Acetone (Optima)	\$50.00 /bottle		0	\$0
HCl (Optima)	\$285.00 /bottle		0	\$0
HNO3 (Optima)	\$175.00 /bottle		0	\$0
Ascorbic Acid	\$10.00 /bottle		0	\$0
Filters (0.45uM & 0.5uM)	\$50.00 /box		0	\$0
Overboots	\$4.00 /pair		24	\$96
Respirator Cartridges	\$15.00 /pair		1	\$15
Packing Tape (doz)	\$72.00 /case		0	\$0
Padlocks	\$12.00 each		0	\$0
Sampling Tables	\$40.00 each		1	\$40
Radiological Badges	\$20.00 each		2	\$40
Aluminum Foil	\$1.00 /roll		0	\$0
Stain Stl bwl/spn	\$30.00 /set		0	\$0
Survey Stake/Flag	\$20.00 /bundle		2	\$40
Teflon tape	\$8.00 /roll		0	\$0
Tyveks	\$6.30 each		24	\$151
Water (HPLC Grade)	\$97.00 /case		0	\$0
Ziplock bags	\$3.00 /box		0	\$0
Calibration Gas	\$450.00 /tank		0	\$0
Ultra Pure Air	\$310.00 /ton		0	\$0
Teflon Tubing	\$120.00 /roll		0	\$0
Teflon Sheeting	\$500.00 /roll		0	\$0
Folding Live Traps	\$15.00 each		0	\$0
Glassware	\$25.00 each		0	\$0
Quartz Filters	\$10.00 each		0	\$0
Vermiculite Packing	\$16.00 /bag		0	\$0

SUBTOTAL MATLS & SUPPLIES: \$518

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3.3
Performance of Exposure
Rate Surveys
70/dy x 12.4dy = 870measurements

Prop No: 979002-00001

	<u>Unit</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
TRAVEL					
Airfare Boston\Syracuse	\$500.00 /trip		2	\$1,000	
Airfare Boston\Huntsville	\$900.00 /trip		0	\$0	
Subsistence-Seneca	\$96.00 /day		28	\$2,688	
Subsistence-Huntsville	\$89.00 /day		0	\$0	
Parking,Airport	\$13.00 /day		28	\$364	
Auto Rental	\$55.00 /day		0	\$0	
Suburban\Van rental	\$585.00 /week		3	\$1,755	
Mileage	\$0.31 /mile		150	\$47	
SUBTOTAL TRAVEL:				\$5,854	

OTHERS

IN-HOUSE SERVICES

Telephone	\$4.00 /call	20	\$80
Word Proc/PC	\$3.70 /hour	0	\$0
CADD	\$5.00 /hour	0	\$0
Facsimile	\$1.00 /page	50	\$50
Overnight Express			
Letter/2 lb pack	\$14.50 each	0	\$0
Package (50 lbs)	\$96.25 each	8	\$770
Mail 4-lb pack	\$4.10 /pack	0	\$0
Mail letters	\$0.54 /letter	0	\$0

Subtotal Services \$900

REPRODUCTION

Photocopier	\$0.05 /page	500	\$25
Aerial Photo repro	\$10.00 /photo	0	\$0
Blueline repro	\$1.00 /Sheet	0	\$0
Cronoflex Prod	\$5.50 /Sq Ft	0	\$0
3-ring binders	\$15.00 each	0	\$0
Color Copies	\$2.00 /page	0	\$0

Subtotal Reproduction \$25

Client: U.S. Army Corps of Engineers
Huntsville Division

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Parsons Engineering Science, Inc.

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SEAD-12
Annex E

Task # 2.3.3
Performance of Exposure
Rate Surveys
70/dy x 12.4dy = 870measurements

Prop No: 979002-00001

	<u>Unit</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00 /week		0	\$0	
Magnetometer	\$42.00 /week		0	\$0	
pH/Cond meter	\$50.00 /week		0	\$0	
Flow thru pH/Cond meter	\$257.00 /week		0	\$0	
DO meter	\$55.00 /week		0	\$0	
Soil Gas Supplies	\$50.00 /day		0	\$0	
Slug test eqt	\$50.00 /week		0	\$0	
Water level ind	\$40.00 /week		0	\$0	
Turbidimeter	\$30.00 /week		0	\$0	
Data Logger, Trnsdcr	\$135.00 /day		0	\$0	
Flow Meter	\$30.00 /week		0	\$0	
Water coolers	\$40.00 /month		0.5	\$20	
Equipment Trailer	\$1,000.00 /month		0.5	\$500	
Grundfus Redi Flow Pump	\$64.00 /day		0	\$0	
PUF Sampler	\$150.00 /week		0	\$0	
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0	
Hi- Vol Sampler	\$75.00 /week		0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00 /day		0	\$0	
Ponar Sediment Sampler	\$27.00 /day		0	\$0	
3.2 kw Generator	\$50.00 /day		0	\$0	
Seismograph	\$200.00 /day		0	\$0	
EM-31	\$85.00 /day		0	\$0	
GPR	\$500.00 /day		0	\$0	

Subtotal Rental \$520

HEALTH & SAFETY EQUIPMENT

HNu Meter	\$50.00 /day	13	\$650
Alpha Survey Meter	\$80.00 /week	0	\$0
Alpha Scintillation Counter	\$100.00 /week	0	\$0
Beta Sample Counter	\$100.00 /week	0	\$0
Gas Proportional Detector	\$100.00 /week	0	\$0
Gas Prop. Detector-Floor	\$100.00 /week	0	\$0
Radon Monitor	\$300.00 /week	0	\$0
Gamma Radiation Meter	\$50.00 /day	13	\$650
Calib Gas	\$10.00 /day	0	\$0
2-way radios	\$15.00 /ea/wk	6	\$90
Air Purif Resp	\$20.00 /week	0	\$0
10-Gal Eye Wash	\$35.00 /week	2	\$70
Combination SCBA/SAR	\$150.00 /day	0	\$0

Subtotal H & S \$1,460

SUBTOTAL OTHERS: \$2,905

SUBTOTAL LABOR & ODC'S: \$23,963

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3.3
Performance of Exposure
Rate Surveys
70/dy x 12.4dy = 870measurements

Prop No: 979002-00001

Unit				
Cost	Units	Quantity	Cost	Notes

SUBCONTRACTORS

GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Iron(Ferrous)	\$30.00 each	0	\$0
Sulfide	\$30.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (EPA 9060)	\$25.00 each	0	\$0
TOX (EPA 9056)	\$50.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
BOD	\$60.00 each	0	\$0
Sulfate(EPA 300)	\$25.00 each	0	\$0
COD	\$50.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Volatiles (EPA 524)	\$195.00 each	0	\$0
Hardness(EPA 130.2)	\$15.00 each	0	\$0
Alkalinity(EPA 310)	\$12.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (L. Kahn)	\$60.00 each	0	\$0
TOX (EPA 9056)	\$70.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

Subtotal Team Laboratory	\$0
--------------------------	-----

MISC. LABORATORY ANALYSIS

Grain Size Dist	\$120.00 each	0	\$0
TCLP	\$1,500.00 each	0	\$0
Moisture Content	\$15.00 each	0	\$0
Bulk Density	\$35.00 each	0	\$0
Chromium (Level II)	\$30.00 each	0	\$0
Total Suspended Solids	\$20.00 each	0	\$0
Total Dissolved Solids	\$20.00 each	0	\$0
Ammonia	\$25.00 each	0	\$0
Phosphate	\$25.00 each	0	\$0
Cation Exchange Capacity	\$100.00 each	0	\$0

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3.3
Performance of Exposure
Rate Surveys
70/dy x 12.4dy = 870measurements

Prop No: 979002-00001

	Unit			
	Cost	Units	Quantity	Cost
Notes				
RADIOLOGICAL LABORATORY ANALYSIS				
Water Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gross Alpha&Beta	\$45.00	each	0	\$0
Soil Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gamma Spectrometry	\$0.00	each	0	\$0
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0
Sample Prep/Return	\$0.00	each	0	\$0
Wipe Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gross Alpha&Beta	\$45.00	each	0	\$0
AIR SAMPLES LABORATORY ANALYSIS				
SVOC's	\$490.00	each	0	\$0
Metals	\$150.00	each	0	\$0
Radon (Alpha Film)	\$25.00	each	0	\$0
Subtotal Misc. Laboratory				\$0
INVESTIGATION SUBCONTRACTORS				
Driller	Lump Sum	each	0	\$0
Photogrammetry	Lump Sum	each	0	\$0
IDW Disposal	Lump Sum	each	0	\$0
Surveyor	Lump Sum	each	0	\$0
Subtotal Investigation Subcontractors				\$0
Subtotal Laboratory & Investigation Subcontractors:				\$0
3% Mark-up:				\$0
SUBTOTAL SUBCONTRACTORS:				\$0
=====				
TASK TOTAL:				\$23,963

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3.4
Performance of Wipe Sampling
100 Wipes/dy x 10dy=1000Wipes

Prop No: 979002-00001

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74 /hour		0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47 /hour		0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11 /hour		8	\$353	
Professional Level 5, Step 3 (P56)	\$37.99 /hour		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91 /hour		8	\$263	
Professional Level 5, Step 1 (P52)	\$29.39 /hour		0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13 /hour		0	\$0	
Professional Level 4, Step 1 (P42)	\$25.20 /hour		100	\$2,520	
Professional Level 3, Step 1 (P35)	\$24.04 /hour		0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09 /hour		0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89 /hour		0	\$0	
Professional Level 1, Step 2 (P18)	\$18.57 /hour		100	\$1,857	
Professional Level 1, Step 1 (P12)	\$14.84 /hour		0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10 /hour		0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58 /hour		0	\$0	
Technician Level 4, Step 1 (T42)	\$14.08 /hour		0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99 /hour		0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61 /hour		0	\$0	
Technician Level 2 (T25)	\$10.13 /hour		0	\$0	
Technician Level 1 (T15)	\$8.89 /hour		0	\$0	
Support Level 3 (S35)	\$20.61 /hour		0	\$0	
Support Level 2 (S25)	\$12.40 /hour		0	\$0	
Support Level 1 (S15)	\$8.72 /hour		0	\$0	
TOTAL HOURS/LABOR COST			216	\$4,993	
Contract Year:	1				
Base Yr					
Overhead Rate:	143%				
Labor Burden:				\$7,140	
SUBTOTAL BURDENED LABOR:				\$12,133	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3.4
Performance of Wipe Sampling
100 Wipes/dy x 10dy=1000Wipes

Prop No: 979002-00001

	<u>Unit</u>			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
MATERIALS AND SUPPLIES				
Bottle labels	\$20.00	/roll	0	\$0
40 mL VOA Vials	\$122.74	/case	0	\$0
1 Liter Amber Bottles	\$37.95	/case	0	\$0
32 oz. HDPE Bottles	\$30.75	/case	0	\$0
Braided Nylon Rope	\$0.15	/foot	0	\$0
Bubble Pack	\$84.00	/roll	1	\$84
Decon Eqt	\$18.00	/kit	1	\$18
55g drums fill/mov	\$100.00	each	0	\$0
Field Notebook	\$14.00	each	1	\$14
Ice	\$1.00	/bag	0	\$0
Latex Gloves	\$10.00	/box	2	\$20
Methanol (Optima)	\$25.00	/bottle	0	\$0
Hexane (Optima)	\$25.00	/bottle	0	\$0
Acetone (Optima)	\$50.00	/bottle	0	\$0
HCl (Optima)	\$285.00	/bottle	0	\$0
HNO3 (Optima)	\$175.00	/bottle	0	\$0
Ascorbic Acid	\$10.00	/bottle	0	\$0
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0
Overboots	\$4.00	/pair	20	\$80
Respirator Cartridges	\$15.00	/pair	1	\$15
Packing Tape (doz)	\$72.00	/case	0	\$0
Padlocks	\$12.00	each	0	\$0
Sampling Tables	\$40.00	each	1	\$40
Radiological Badges	\$20.00	each	4	\$80
Aluminum Foil	\$1.00	/roll	0	\$0
Stain Stl bwl/spn	\$30.00	/set	0	\$0
Survey Stake/Flag	\$20.00	/bundle	0	\$0
Teflon tape	\$8.00	/roll	0	\$0
Tyveks	\$6.30	each	20	\$126
Water (HPLC Grade)	\$97.00	/case	0	\$0
Ziplock bags	\$3.00	/box	0	\$0
Calibration Gas	\$450.00	/tank	0	\$0
Ultra Pure Air	\$310.00	/ton	0	\$0
Teflon Tubing	\$120.00	/roll	0	\$0
Teflon Sheeting	\$500.00	/roll	0	\$0
Folding Live Traps	\$15.00	each	0	\$0
Glassware	\$25.00	each	0	\$0
Quartz Filters	\$10.00	each	0	\$0
Vermiculite Packing	\$16.00	/bag	0	\$0
SUBTOTAL MATLS & SUPPLIES:				\$477

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3.4
Performance of Wipe Sampling
100 Wipes/dy x 10dy=1000Wipes

Prop No: 979002-00001

	<u>Unit</u>			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
TRAVEL				
Airfare Boston\Syracuse	\$500.00	/trip	2	\$1,000
Airfare Boston\Huntsville	\$900.00	/trip	0	\$0
Subsistence-Seneca	\$96.00	/day	20	\$1,920
Subsistence-Huntsville	\$89.00	/day	0	\$0
Parking,Airport	\$13.00	/day	20	\$260
Auto Rental	\$55.00	/day	10	\$550
Suburban\Van rental	\$585.00	/week	0	\$0
Mileage	\$0.31	/mile	150	\$47
SUBTOTAL TRAVEL:				\$3,777

OTHERS

IN-HOUSE SERVICES

Telephone	\$4.00	/call	20	\$80
Word Proc/PC	\$3.70	/hour	0	\$0
CADD	\$5.00	/hour	0	\$0
Facsimile	\$1.00	/page	50	\$50
Overnight Express				
Letter/2 lb pack	\$14.50	each	0	\$0
Package (50 lbs)	\$96.25	each	8	\$770
Mail 4-lb pack	\$4.10	/pack	0	\$0
Mail letters	\$0.54	/letter	0	\$0

Subtotal Services \$900

REPRODUCTION

Photocopier	\$0.05	/page	500	\$25
Aerial Photo repro	\$10.00	/photo	0	\$0
Blueline repro	\$1.00	/Sheet	0	\$0
Cronoflex Prod	\$5.50	/Sq Ft	0	\$0
3-ring binders	\$15.00	each	0	\$0
Color Copies	\$2.00	/page	0	\$0

Subtotal Reproduction \$25

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3.4
Performance of Wipe Sampling
100 Wipes/dy x 10dy=1000Wipes

Prop No: 979002-00001

	<u>Unit</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00 /week		0	\$0	
Magnetometer	\$42.00 /week		0	\$0	
pH/Cond meter	\$50.00 /week		0	\$0	
Flow thru pH/Cond meter	\$257.00 /week		0	\$0	
DO meter	\$55.00 /week		0	\$0	
Soil Gas Supplies	\$50.00 /day		0	\$0	
Slug test eqt	\$50.00 /week		0	\$0	
Water level ind	\$40.00 /week		0	\$0	
Turbidimeter	\$30.00 /week		0	\$0	
Data Logger, Trnsdcr	\$135.00 /day		0	\$0	
Flow Meter	\$30.00 /week		0	\$0	
Water coolers	\$40.00 /month		0.5	\$20	
Equipment Trailer	\$1,000.00 /month		0.5	\$500	
Grundfus Redi Flow Pump	\$64.00 /day		0	\$0	
PUF Sampler	\$150.00 /week		0	\$0	
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0	
Hi- Vol Sampler	\$75.00 /week		0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00 /day		0	\$0	
Ponar Sediment Sampler	\$27.00 /day		0	\$0	
3.2 kw Generator	\$50.00 /day		0	\$0	
Seismograph	\$200.00 /day		0	\$0	
EM-31	\$85.00 /day		0	\$0	
GPR	\$500.00 /day		0	\$0	
Subtotal Rental				\$520	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00 /day		10	\$500	
Alpha Survey Meter	\$80.00 /week		0	\$0	
Alpha Scintillation Counter	\$100.00 /week		2	\$200	
Beta Sample Counter	\$100.00 /week		2	\$200	
Gas Proportional Detector	\$100.00 /week		0	\$0	
Gas Prop. Detector-Floor	\$100.00 /week		0	\$0	
Radon Monitor	\$300.00 /week		0	\$0	
Gamma Radiation Meter	\$50.00 /day		0	\$0	
Calib Gas	\$10.00 /day		0	\$0	
2-way radios	\$15.00 /ea/wk		4	\$60	
Air Purif Resp	\$20.00 /week		0	\$0	
10-Gal Eye Wash	\$35.00 /week		2	\$70	
Combination SCBA/SAR	\$150.00 /day		0	\$0	
Subtotal H & S				\$1,030	
SUBTOTAL OTHERS:				\$2,475	
SUBTOTAL LABOR & ODC'S:				\$18,862	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3.4
Performance of Wipe Sampling
100 Wipes/dy x 10dy=1000Wipes

Prop No: 979002-00001

	<u>Unit</u>				
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>

SUBCONTRACTORS

GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Iron(Ferrous)	\$30.00 each	0	\$0
Sulfide	\$30.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (EPA 9060)	\$25.00 each	0	\$0
TOX (EPA 9056)	\$50.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
BOD	\$60.00 each	0	\$0
Sulfate(EPA 300)	\$25.00 each	0	\$0
COD	\$50.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Volatiles (EPA 524)	\$195.00 each	0	\$0
Hardness(EPA 130.2)	\$15.00 each	0	\$0
Alkalinity(EPA 310)	\$12.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (L. Kahn)	\$60.00 each	0	\$0
TOX (EPA 9056)	\$70.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

Subtotal Team Laboratory	\$0
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MISC. LABORATORY ANALYSIS

Grain Size Dist	\$120.00 each	0	\$0
TCLP	\$1,500.00 each	0	\$0
Moisture Content	\$15.00 each	0	\$0
Bulk Density	\$35.00 each	0	\$0
Chromium (Level II)	\$30.00 each	0	\$0
Total Suspended Solids	\$20.00 each	0	\$0
Total Dissolved Solids	\$20.00 each	0	\$0
Ammonia	\$25.00 each	0	\$0
Phosphate	\$25.00 each	0	\$0
Cation Exchange Capacity	\$100.00 each	0	\$0

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3.4
Performance of Wipe Sampling
100 Wipes/dy x 10dy=1000Wipes

Prop No: 979002-00001

	Unit			
	Cost	Units	Quantity	Cost
Notes				
RADIOLOGICAL LABORATORY ANALYSIS				
Water Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gross Alpha&Beta	\$45.00	each	0	\$0
Soil Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gamma Spectrometry	\$0.00	each	0	\$0
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0
Sample Prep/Return	\$0.00	each	0	\$0
Wipe Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gross Alpha&Beta	\$45.00	each	0	\$0
AIR SAMPLES LABORATORY ANALYSIS				
SVOC's	\$490.00	each	0	\$0
Metals	\$150.00	each	0	\$0
Radon (Alpha Film)	\$25.00	each	0	\$0
Subtotal Misc. Laboratory				\$0
INVESTIGATION SUBCONTRACTORS				
Driller	Lump Sum	each	0	\$0
Photogrammetry	Lump Sum	each	0	\$0
IDW Disposal	Lump Sum	each	0	\$0
Surveyor	Lump Sum	each	0	\$0
Subtotal Investigation Subcontractors				\$0
Subtotal Laboratory & Investigation Subcontractors:				\$0
3% Mark-up:				\$0
SUBTOTAL SUBCONTRACTORS:				\$0
=====				
TASK TOTAL:				\$18,862

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3.5
Performance of Radon Investigations
Placement of Cannisters = 50/dy
Collection of Cannisters = 50/dy

Prop No: 979002-00001

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74 /hour		0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47 /hour		0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11 /hour		8	\$353	
Professional Level 5, Step 3 (P56)	\$37.99 /hour		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91 /hour		8	\$263	
Professional Level 5, Step 1 (P52)	\$29.39 /hour		0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13 /hour		0	\$0	
Professional Level 4, Step 1 (P42)	\$25.20 /hour		40	\$1,008	
Professional Level 3, Step 1 (P35)	\$24.04 /hour		0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09 /hour		0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89 /hour		0	\$0	
Professional Level 1, Step 2 (P18)	\$18.57 /hour		40	\$743	
Professional Level 1, Step 1 (P12)	\$14.84 /hour		0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10 /hour		0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58 /hour		0	\$0	
Technician Level 4, Step 1 (T42)	\$14.08 /hour		0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99 /hour		0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61 /hour		0	\$0	
Technician Level 2 (T25)	\$10.13 /hour		0	\$0	
Technician Level 1 (T15)	\$8.89 /hour		0	\$0	
Support Level 3 (S35)	\$20.61 /hour		0	\$0	
Support Level 2 (S25)	\$12.40 /hour		0	\$0	
Support Level 1 (S15)	\$8.72 /hour		0	\$0	
TOTAL HOURS/LABOR COST			96	\$2,367	
Contract Year:	1				
Base Yr					
Overhead Rate:	143%				
Labor Burden:				\$3,385	
SUBTOTAL BURDENED LABOR:				\$5,752	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3.5
Performance of Radon Investigations
Placement of Cannisters = 50/dy
Collection of Cannisters = 50/dy

Prop No: 979002-00001

	Unit			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
MATERIALS AND SUPPLIES				
Bottle labels	\$20.00	/roll	0	\$0
40 mL VOA Vials	\$122.74	/case	0	\$0
1 Liter Amber Bottles	\$37.95	/case	0	\$0
32 oz. HDPE Bottles	\$30.75	/case	0	\$0
Braided Nylon Rope	\$0.15	/foot	0	\$0
Bubble Pack	\$84.00	/roll	1	\$84
Decon Eqt	\$18.00	/kit	1	\$18
55g drums fill/mov	\$100.00	each	0	\$0
Field Notebook	\$14.00	each	1	\$14
Ice	\$1.00	/bag	0	\$0
Latex Gloves	\$10.00	/box	2	\$20
Methanol (Optima)	\$25.00	/bottle	0	\$0
Hexane (Optima)	\$25.00	/bottle	0	\$0
Acetone (Optima)	\$50.00	/bottle	0	\$0
HCl (Optima)	\$285.00	/bottle	0	\$0
HNO3 (Optima)	\$175.00	/bottle	0	\$0
Ascorbic Acid	\$10.00	/bottle	0	\$0
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0
Overboots	\$4.00	/pair	8	\$32
Respirator Cartridges	\$15.00	/pair	1	\$15
Packing Tape (doz)	\$72.00	/case	1	\$72
Padlocks	\$12.00	each	0	\$0
Sampling Tables	\$40.00	each	1	\$40
Radiological Badges	\$20.00	each	2	\$40
Aluminum Foil	\$1.00	/roll	0	\$0
Stain Stl bwl/spn	\$30.00	/set	0	\$0
Survey Stake/Flag	\$20.00	/bundle	2	\$40
Teflon tape	\$8.00	/roll	0	\$0
Tyveks	\$6.30	each	8	\$50
Water (HPLC Grade)	\$97.00	/case	0	\$0
Ziplock bags	\$3.00	/box	0	\$0
Calibration Gas	\$450.00	/tank	0	\$0
Ultra Pure Air	\$310.00	/ton	0	\$0
Teflon Tubing	\$120.00	/roll	0	\$0
Teflon Sheeting	\$500.00	/roll	0	\$0
Folding Live Traps	\$15.00	each	0	\$0
Glassware	\$25.00	each	0	\$0
Quartz Filters	\$10.00	each	0	\$0
Vermiculite Packing	\$16.00	/bag	0	\$0

SUBTOTAL MATLS & SUPPLIES: \$425

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3.5
Performance of Radon Investigations
Placement of Cannisters = 50/dy
Collection of Cannisters = 50/dy

Prop No: 979002-00001

	<u>Unit</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
TRAVEL					
Airfare Boston\Syracuse	\$500.00 /trip		4	\$2,000	
Airfare Boston\Huntsville	\$900.00 /trip		0	\$0	
Subsistence-Seneca	\$96.00 /day		8	\$768	
Subsistence-Huntsville	\$89.00 /day		0	\$0	
Parking,Airport	\$13.00 /day		8	\$104	
Auto Rental	\$55.00 /day		6	\$330	
Suburban\Van rental	\$585.00 /week		0	\$0	
Mileage	\$0.31 /mile		150	\$47	
SUBTOTAL TRAVEL:				\$3,249	

OTHERS

IN-HOUSE SERVICES

Telephone	\$4.00 /call	20	\$80
Word Proc/PC	\$3.70 /hour	0	\$0
CADD	\$5.00 /hour	0	\$0
Facsimile	\$1.00 /page	50	\$50
Overnight Express			
Letter/2 lb pack	\$14.50 each	0	\$0
Package (50 lbs)	\$96.25 each	8	\$770
Mail 4-lb pack	\$4.10 /pack	0	\$0
Mail letters	\$0.54 /letter	0	\$0

Subtotal Services \$900

REPRODUCTION

Photocopier	\$0.05 /page	500	\$25
Aerial Photo repro	\$10.00 /photo	0	\$0
Blueline repro	\$1.00 /Sheet	0	\$0
Cronoflex Prod	\$5.50 /Sq Ft	0	\$0
3-ring binders	\$15.00 each	0	\$0
Color Copies	\$2.00 /page	0	\$0

Subtotal Reproduction \$25

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3.5
Performance of Radon Investigations
Placement of Cannisters = 50/dy
Collection of Cannisters = 50/dy

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00 /week		0	\$0	
Magnetometer	\$42.00 /week		0	\$0	
pH/Cond meter	\$50.00 /week		0	\$0	
Flow thru pH/Cond meter	\$257.00 /week		0	\$0	
DO meter	\$55.00 /week		0	\$0	
Soil Gas Supplies	\$50.00 /day		0	\$0	
Slug test eqt	\$50.00 /week		0	\$0	
Water level ind	\$40.00 /week		0	\$0	
Turbidimeter	\$30.00 /week		0	\$0	
Data Logger, Trnsdcr	\$135.00 /day		0	\$0	
Flow Meter	\$30.00 /week		0	\$0	
Water coolers	\$40.00 /month		0.5	\$20	
Equipment Trailer	\$1,000.00 /month		0.5	\$500	
Grundfus Redi Flow Pump	\$64.00 /day		0	\$0	
PUF Sampler	\$150.00 /week		0	\$0	
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0	
Hi- Vol Sampler	\$75.00 /week		0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00 /day		0	\$0	
Ponar Sediment Sampler	\$27.00 /day		0	\$0	
3.2 kw Generator	\$50.00 /day		0	\$0	
Seismograph	\$200.00 /day		0	\$0	
EM-31	\$85.00 /day		0	\$0	
GPR	\$500.00 /day		0	\$0	
Subtotal Rental				\$520	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00 /day		4	\$200	
Alpha Survey Meter	\$80.00 /week		0	\$0	
Alpha Scintillation Counter	\$100.00 /week		0	\$0	
Beta Sample Counter	\$100.00 /week		0	\$0	
Gas Proportional Detector	\$100.00 /week		0	\$0	
Gas Prop. Detector-Floor	\$100.00 /week		0	\$0	
Radon Monitor	\$300.00 /week		0	\$0	
Gamma Radiation Meter	\$50.00 /day		0	\$0	
Calib Gas	\$10.00 /day		0	\$0	
2-way radios	\$15.00 /ea/wk		0	\$0	
Air Purif Resp	\$20.00 /week		0	\$0	
10-Gal Eye Wash	\$35.00 /week		0	\$0	
Combination SCBA/SAR	\$150.00 /day		0	\$0	
Subtotal H & S				\$200	
SUBTOTAL OTHERS:				\$1,645	
SUBTOTAL LABOR & ODC'S:				\$11,071	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3.5
Performance of Radon Investigations
Placement of Cannisters = 50/dy
Collection of Cannisters = 50/dy

Prop No: 979002-00001

	Unit			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
<u>Notes</u>				
SUBCONTRACTORS				
GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS				
Volatiles (TCL)	\$180.00	each	0	\$0
B/N/A (TCL)	\$400.00	each	0	\$0
Pest./PCBs (TCL)	\$180.00	each	0	\$0
Total Metals & CN(TAL)	\$170.00	each	0	\$0
Iron(Ferrous)	\$30.00	each	0	\$0
Sulfide	\$30.00	each	0	\$0
Spec Cond(EPA 9050)	\$8.00	each	0	\$0
Total Organic Carbon (EPA 9060)	\$25.00	each	0	\$0
TOX (EPA 9056)	\$50.00	each	0	\$0
Chloride(EPA 9250)	\$25.00	each	0	\$0
BOD	\$60.00	each	0	\$0
Sulfate(EPA 300)	\$25.00	each	0	\$0
COD	\$50.00	each	0	\$0
pH (EPA 9045)	\$8.00	each	0	\$0
Volatiles (EPA 524)	\$195.00	each	0	\$0
Hardness(EPA 130.2)	\$15.00	each	0	\$0
Alkalinity(EPA 310)	\$12.00	each	0	\$0
Nitrate (EPA 353.2)	\$20.00	each	0	\$0
SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS				
Volatiles (TCL)	\$180.00	each	0	\$0
B/N/A (TCL)	\$400.00	each	0	\$0
Pest./PCBs (TCL)	\$180.00	each	0	\$0
Total Metals & CN(TAL)	\$170.00	each	0	\$0
Spec Cond(EPA 9050)	\$8.00	each	0	\$0
Total Organic Carbon (L. Kahn)	\$60.00	each	0	\$0
TOX (EPA 9056)	\$70.00	each	0	\$0
Chloride(EPA 9250)	\$25.00	each	0	\$0
pH (EPA 9045)	\$8.00	each	0	\$0
Nitrate (EPA 353.2)	\$20.00	each	0	\$0
Subtotal Team Laboratory				\$0
MISC. LABORATORY ANALYSIS				
Grain Size Dist	\$120.00	each	0	\$0
TCLP	\$1,500.00	each	0	\$0
Moisture Content	\$15.00	each	0	\$0
Bulk Density	\$35.00	each	0	\$0
Chromium (Level II)	\$30.00	each	0	\$0
Total Suspended Solids	\$20.00	each	0	\$0
Total Dissolved Solids	\$20.00	each	0	\$0
Ammonia	\$25.00	each	0	\$0
Phosphate	\$25.00	each	0	\$0
Cation Exchange Capacity	\$100.00	each	0	\$0

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3.5
Performance of Radon Investigations
Placement of Cannisters = 50/dy
Collection of Cannisters = 50/dy

Prop No: 979002-00001

	<u>Unit</u>		<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
	<u>Cost</u>	<u>Units</u>			
RADIOLOGICAL LABORATORY ANALYSIS					
Water Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross Alpha&Beta	\$45.00	each	0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gamma Spectrometry	\$0.00	each	0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross Alpha&Beta	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subtotal Misc. Laboratory				\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	0	\$0	
Photogrammetry	Lump Sum	each	0	\$0	
IDW Disposal	Lump Sum	each	0	\$0	
Surveyor	Lump Sum	each	0	\$0	
Subtotal Investigation Subcontractors				\$0	
Subtotal Laboratory & Investigation Subcontractors:				\$0	
3% Mark-up:				\$0	
SUBTOTAL SUBCONTRACTORS:				\$0	

TASK TOTAL: \$11,071

Client: U.S. Army Corps of Engineers Huntsville Division	Printed: 22-Mar-96	Parsons Engineering Science, Inc.
Project: Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas SEAD-12 Annex E		Task # 2.3.6 Performance of Special Sampling 4Samples/dy x 3dy=12Samples
Prop No: 979002-00001		

	Unit Cost	Units	Quantity	Cost	Notes
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74 /hour		0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47 /hour		0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11 /hour		8	\$353	
Professional Level 5, Step 3 (P56)	\$37.99 /hour		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91 /hour		8	\$263	
Professional Level 5, Step 1 (P52)	\$29.39 /hour		0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13 /hour		0	\$0	
Professional Level 4, Step 1 (P42)	\$25.20 /hour		30	\$756	
Professional Level 3, Step 1 (P35)	\$24.04 /hour		0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09 /hour		0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89 /hour		0	\$0	
Professional Level 1, Step 2 (P18)	\$18.57 /hour		30	\$557	
Professional Level 1, Step 1 (P12)	\$14.84 /hour		0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10 /hour		0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58 /hour		0	\$0	
Technician Level 4, Step 1 (T42)	\$14.08 /hour		0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99 /hour		0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61 /hour		0	\$0	
Technician Level 2 (T25)	\$10.13 /hour		0	\$0	
Technician Level 1 (T15)	\$8.89 /hour		0	\$0	
Support Level 3 (S35)	\$20.61 /hour		0	\$0	
Support Level 2 (S25)	\$12.40 /hour		0	\$0	
Support Level 1 (S15)	\$8.72 /hour		0	\$0	
TOTAL HOURS/LABOR COST			76	\$1,929	
Contract Year: 1					
Base Yr					
Overhead Rate: 143%					
			Labor Burden:	\$2,759	
			SUBTOTAL BURDENED LABOR:	\$4,688	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3.6
Performance of Special
Sampling
4Samples/dy x 3dy=12Samples

Prop No: 979002-00001

	<u>Unit</u>			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
MATERIALS AND SUPPLIES				
Bottle labels	\$20.00	/roll	1	\$20
40 mL VOA Vials	\$122.74	/case	0	\$0
1 Liter Amber Bottles	\$37.95	/case	6	\$228
32 oz. HDPE Bottles	\$30.75	/case	6	\$185
Braided Nylon Rope	\$0.15	/foot	0	\$0
Bubble Pack	\$84.00	/roll	1	\$84
Decon Eqt	\$18.00	/kit	1	\$18
55g drums fill/mov	\$100.00	each	0	\$0
Field Notebook	\$14.00	each	1	\$14
Ice	\$1.00	/bag	20	\$20
Latex Gloves	\$10.00	/box	2	\$20
Methanol (Optima)	\$25.00	/bottle	1	\$25
Hexane (Optima)	\$25.00	/bottle	1	\$25
Acetone (Optima)	\$50.00	/bottle	1	\$50
HCl (Optima)	\$285.00	/bottle	1	\$285
HNO3 (Optima)	\$175.00	/bottle	1	\$175
Ascorbic Acid	\$10.00	/bottle	0	\$0
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0
Overboots	\$4.00	/pair	6	\$24
Respirator Cartridges	\$15.00	/pair	1	\$15
Packing Tape (doz)	\$72.00	/case	1	\$72
Padlocks	\$12.00	each	0	\$0
Sampling Tables	\$40.00	each	1	\$40
Radiological Badges	\$20.00	each	2	\$40
Aluminum Foil	\$1.00	/roll	0	\$0
Stain Stl bwl/spn	\$30.00	/set	12	\$360
Survey Stake/Flag	\$20.00	/bundle	1	\$20
Teflon tape	\$8.00	/roll	0	\$0
Tyveks	\$6.30	each	6	\$38
Water (HPLC Grade)	\$97.00	/case	2	\$194
Ziplock bags	\$3.00	/box	0	\$0
Calibration Gas	\$450.00	/tank	0	\$0
Ultra Pure Air	\$310.00	/ton	0	\$0
Teflon Tubing	\$120.00	/roll	0	\$0
Teflon Sheeting	\$500.00	/roll	0	\$0
Folding Live Traps	\$15.00	each	0	\$0
Glassware	\$25.00	each	0	\$0
Quartz Filters	\$10.00	each	0	\$0
Vermiculite Packing	\$16.00	/bag	8	\$128

SUBTOTAL MATLS & SUPPLIES: \$2,079

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3.6
Performance of Special
Sampling
4Samples/dy x 3dy=12Samples

Prop No: 979002-00001

	Unit			
	Cost	Units	Quantity	Cost
TRAVEL				
Airfare Boston\Syracuse	\$500.00 /trip		2	\$1,000
Airfare Boston\Huntsville	\$900.00 /trip		0	\$0
Subsistence-Seneca	\$96.00 /day		6	\$576
Subsistence-Huntsville	\$89.00 /day		0	\$0
Parking,Airport	\$13.00 /day		6	\$78
Auto Rental	\$55.00 /day		0	\$0
Suburban\Van rental	\$585.00 /week		1	\$585
Mileage	\$0.31 /mile		150	\$47
SUBTOTAL TRAVEL:				\$2,286

OTHERS

IN-HOUSE SERVICES

Telephone	\$4.00 /call	20	\$80
Word Proc/PC	\$3.70 /hour	0	\$0
CADD	\$5.00 /hour	0	\$0
Facsimile	\$1.00 /page	50	\$50
Overnight Express			
Letter/2 lb pack	\$14.50 each	0	\$0
Package (50 lbs)	\$96.25 each	8	\$770
Mail 4-lb pack	\$4.10 /pack	0	\$0
Mail letters	\$0.54 /letter	0	\$0

Subtotal Services \$900

REPRODUCTION

Photocopier	\$0.05 /page	500	\$25
Aerial Photo repro	\$10.00 /photo	0	\$0
Blueline repro	\$1.00 /Sheet	0	\$0
Cronoflex Prod	\$5.50 /Sq Ft	0	\$0
3-ring binders	\$15.00 each	0	\$0
Color Copies	\$2.00 /page	0	\$0

Subtotal Reproduction \$25

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3.6
Performance of Special
Sampling
4Samples/dy x 3dy=12Samples

Prop No: 979002-00001

	<u>Unit</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00 /week		0	\$0	
Magnetometer	\$42.00 /week		0	\$0	
pH/Cond meter	\$50.00 /week		0	\$0	
Flow thru pH/Cond meter	\$257.00 /week		0	\$0	
DO meter	\$55.00 /week		0	\$0	
Soil Gas Supplies	\$50.00 /day		0	\$0	
Slug test eqt	\$50.00 /week		0	\$0	
Water level ind	\$40.00 /week		0	\$0	
Turbidimeter	\$30.00 /week		0	\$0	
Data Logger,Trnsdcr	\$135.00 /day		0	\$0	
Flow Meter	\$30.00 /week		0	\$0	
Water coolers	\$40.00 /month		0.5	\$20	
Equipment Trailer	\$1,000.00 /month		0.5	\$500	
Grundfus Redi Flow Pump	\$64.00 /day		0	\$0	
PUF Sampler	\$150.00 /week		0	\$0	
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0	
Hi- Vol Sampler	\$75.00 /week		0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00 /day		0	\$0	
Ponar Sediment Sampler	\$27.00 /day		0	\$0	
3.2 kw Generator	\$50.00 /day		0	\$0	
Seismograph	\$200.00 /day		0	\$0	
EM-31	\$85.00 /day		0	\$0	
GPR	\$500.00 /day		0	\$0	
Subtotal Rental				\$520	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00 /day		3	\$150	
Alpha Survey Meter	\$80.00 /week		1	\$80	
Alpha Scintillation Counter	\$100.00 /week		1	\$100	
Beta Sample Counter	\$100.00 /week		1	\$100	
Gas Proportional Detector	\$100.00 /week		1	\$100	
Gas Prop. Detector-Floor	\$100.00 /week		0	\$0	
Radon Monitor	\$300.00 /week		0	\$0	
Gamma Radiation Meter	\$50.00 /day		0	\$0	
Calib Gas	\$10.00 /day		0	\$0	
2-way radios	\$15.00 /ea/wk		2	\$30	
Air Purif Resp	\$20.00 /week		0	\$0	
10-Gal Eye Wash	\$35.00 /week		2	\$70	
Combination SCBA/SAR	\$150.00 /day		0	\$0	
Subtotal H & S				\$630	
SUBTOTAL OTHERS:				\$2,075	
SUBTOTAL LABOR & ODC'S:				\$11,128	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3.6
Performance of Special
Sampling
4Samples/dy x 3dy=12Samples

Prop No: 979002-00001

	<u>Unit</u>				
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>

SUBCONTRACTORS

GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Iron(Ferrous)	\$30.00 each	0	\$0
Sulfide	\$30.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (EPA 9060)	\$25.00 each	0	\$0
TOX (EPA 9056)	\$50.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
BOD	\$60.00 each	0	\$0
Sulfate(EPA 300)	\$25.00 each	0	\$0
COD	\$50.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Volatiles (EPA 524)	\$195.00 each	0	\$0
Hardness(EPA 130.2)	\$15.00 each	0	\$0
Alkalinity(EPA 310)	\$12.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (L. Kahn)	\$60.00 each	0	\$0
TOX (EPA 9056)	\$70.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

Subtotal Team Laboratory	\$0
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MISC. LABORATORY ANALYSIS

Grain Size Dist	\$120.00 each	0	\$0
TCLP	\$1,500.00 each	0	\$0
Moisture Content	\$15.00 each	0	\$0
Bulk Density	\$35.00 each	0	\$0
Chromium (Level II)	\$30.00 each	0	\$0
Total Suspended Solids	\$20.00 each	0	\$0
Total Dissolved Solids	\$20.00 each	0	\$0
Ammonia	\$25.00 each	0	\$0
Phosphate	\$25.00 each	0	\$0
Cation Exchange Capacity	\$100.00 each	0	\$0

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.3.6
Performance of Special
Sampling
4Samples/dy x 3dy=12Samples

Prop No: 979002-00001

	<u>Unit</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
RADIOLOGICAL LABORATORY ANALYSIS					
Water Samples For:					
Thorium 232, 230, 227	\$60.00 each		0	\$0	
Uranium 238, 235, 233+234	\$60.00 each		0	\$0	
Radium 226,223	\$40.00 each		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00 each		0	\$0	
Plutonium 239 + 240	\$65.00 each		0	\$0	
Americium 241	\$65.00 each		0	\$0	
Gross Alpha&Beta	\$45.00 each		0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00 each		0	\$0	
Uranium 238, 235, 233+234	\$60.00 each		0	\$0	
Radium 226,223	\$40.00 each		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00 each		0	\$0	
Plutonium 239 + 240	\$65.00 each		0	\$0	
Americium 241	\$65.00 each		0	\$0	
Gamma Spectrometry	\$0.00 each		0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00 each		0	\$0	
Sample Prep/Return	\$0.00 each		0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00 each		0	\$0	
Uranium 238, 235, 233+234	\$60.00 each		0	\$0	
Radium 226,223	\$40.00 each		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00 each		0	\$0	
Plutonium 239 + 240	\$65.00 each		0	\$0	
Americium 241	\$65.00 each		0	\$0	
Gross Alpha&Beta	\$45.00 each		0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00 each		0	\$0	
Metals	\$150.00 each		0	\$0	
Radon (Alpha Film)	\$25.00 each		0	\$0	
Subtotal Misc. Laboratory				\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum each		0	\$0	
Photogrammetry	Lump Sum each		0	\$0	
IDW Disposal	Lump Sum each		0	\$0	
Surveyor	Lump Sum each		0	\$0	
Subtotal Investigation Subcontractors				\$0	
Subtotal Laboratory & Investigation Subcontractors:				\$0	
3% Mark-up:				\$0	
SUBTOTAL SUBCONTRACTORS:				\$0	
=====					
TASK TOTAL:				\$11,128	

Client: U.S. Army Corps of Engineers Huntsville Division	Printed: 22-Mar-96	Parsons Engineering Science, Inc.
Project: Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas SEAD-12 Annex E		Task # 2.4 Soil Investigations Summary Surface Soil Sampling Sub-Surface Soil Sampling Test Pit Sampling
Prop No: 979002-00001		

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
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LABOR COSTS

ENGINEERS AND SCIENTISTS

Professional Level 6, Step 2 (P68)	\$58.74 /hour	0	\$0
Professional Level 6, Step 1 (P62)	\$46.47 /hour	0	\$0
Professional Level 5, Step 4 (P58)	\$44.11 /hour	24	\$1,059
Professional Level 5, Step 3 (P56)	\$37.99 /hour	0	\$0
Professional Level 5, Step 2 (P54)	\$32.91 /hour	48	\$1,580
Professional Level 5, Step 1 (P52)	\$29.39 /hour	0	\$0
Professional Level 4, Step 2 (P48)	\$29.13 /hour	0	\$0
Professional Level 4, Step 1 (P42)	\$25.20 /hour	445	\$11,214
Professional Level 3, Step 1 (P35)	\$24.04 /hour	0	\$0
Professional Level 2, Step 2 (P28)	\$23.09 /hour	0	\$0
Professional Level 2, Step 1 (P22)	\$19.89 /hour	0	\$0
Professional Level 1, Step 2 (P18)	\$18.57 /hour	445	\$8,264
Professional Level 1, Step 1 (P12)	\$14.84 /hour	0	\$0

TECHNICAL AND SUPPORT SPECIALISTS

Technician Level 5 (T55)	\$21.10 /hour	0	\$0
Technician Level 4, Step 2 (T48)	\$16.58 /hour	445	\$7,378
Technician Level 4, Step 1 (T42)	\$14.08 /hour	0	\$0
Technician Level 3, Step 2 (T38)	\$13.99 /hour	0	\$0
Technician Level 3, Step 1 (T32)	\$11.61 /hour	0	\$0
Technician Level 2 (T25)	\$10.13 /hour	0	\$0
Technician Level 1 (T15)	\$8.89 /hour	0	\$0
Support Level 3 (S35)	\$20.61 /hour	0	\$0
Support Level 2 (S25)	\$12.40 /hour	0	\$0
Support Level 1 (S15)	\$8.72 /hour	0	\$0

TOTAL HOURS/LABOR COST	1407	\$29,494
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Contract Year: 1
Base Yr

Overhead Rate: 143% Labor Burden: \$42,177

SUBTOTAL BURDENED LABOR: \$71,671

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.4
Soil Investigations Summary
Surface Soil Sampling
Sub-Surface Soil Sampling
Test Pit Sampling

Prop No: 979002-00001

	Unit			
	Cost	Units	Quantity	Cost
MATERIALS AND SUPPLIES				
Bottle labels	\$20.00 /roll		3	\$60
40 mL VOA Vials	\$122.74 /case		4	\$491
1 Liter Amber Bottles	\$37.95 /case		8	\$304
32 oz. HDPE Bottles	\$30.75 /case		0	\$0
Braided Nylon Rope	\$0.15 /foot		0	\$0
Bubble Pack	\$84.00 /roll		3	\$252
Decon Eqt	\$18.00 /kit		3	\$54
55g drums fill/mov	\$100.00 each		0	\$0
Field Notebook	\$14.00 each		3	\$42
Ice	\$1.00 /bag		40	\$40
Latex Gloves	\$10.00 /box		6	\$60
Methanol (Optima)	\$25.00 /bottle		1	\$25
Hexane (Optima)	\$25.00 /bottle		1	\$25
Acetone (Optima)	\$50.00 /bottle		1	\$50
HCl (Optima)	\$285.00 /bottle		1	\$285
HNO3 (Optima)	\$175.00 /bottle		1	\$175
Ascorbic Acid	\$10.00 /bottle		0	\$0
Filters (0.45uM & 0.5uM)	\$50.00 /box		0	\$0
Overboots	\$4.00 /pair		132	\$528
Respirator Cartridges	\$15.00 /pair		132	\$1,980
Packing Tape (doz)	\$72.00 /case		3	\$216
Padlocks	\$12.00 each		0	\$0
Sampling Tables	\$40.00 each		2	\$80
Radiological Badges	\$20.00 each		6	\$120
Aluminum Foil	\$1.00 /roll		0	\$0
Stain Stl bwl/spn	\$30.00 /set		3	\$90
Survey Stake/Flag	\$20.00 /bundle		5	\$100
Teflon tape	\$8.00 /roll		0	\$0
Tyveks	\$6.30 each		132	\$832
Water (HPLC Grade)	\$97.00 /case		6	\$582
Ziplock bags	\$3.00 /box		0	\$0
Calibration Gas	\$450.00 /tank		0	\$0
Ultra Pure Air	\$310.00 /ton		0	\$0
Teflon Tubing	\$120.00 /roll		0	\$0
Teflon Sheeting	\$500.00 /roll		0	\$0
Folding Live Traps	\$15.00 each		0	\$0
Glassware	\$25.00 each		0	\$0
Quartz Filters	\$10.00 each		0	\$0
Vermiculite Packing	\$16.00 /bag		40	\$640

SUBTOTAL MATLS & SUPPLIES: \$7,030

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.4
Soil Investigations Summary
Surface Soil Sampling
Sub-Surface Soil Sampling
Test Pit Sampling

Prop No: 979002-00001

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
TRAVEL					
Airfare Boston\Syracuse	\$500.00 /trip		1	\$500	
Airfare Boston\Huntsville	\$900.00 /trip		0	\$0	
Subsistence-Seneca	\$96.00 /day		132	\$12,672	
Subsistence-Huntsville	\$89.00 /day		0	\$0	
Parking,Airport	\$13.00 /day		16	\$208	
Auto Rental	\$55.00 /day		44	\$2,420	
Suburban\Van rental	\$585.00 /week		5.5	\$3,218	
Mileage	\$0.31 /mile		300	\$93	
SUBTOTAL TRAVEL:				\$19,111	

OTHERS

IN-HOUSE SERVICES

Telephone	\$4.00 /call	60	\$240
Word Proc/PC	\$3.70 /hour	0	\$0
CADD	\$5.00 /hour	0	\$0
Facsimile	\$1.00 /page	120	\$120
Overnight Express			
Letter/2 lb pack	\$14.50 each	0	\$0
Package (50 lbs)	\$96.25 each	28	\$2,695
Mail 4-lb pack	\$4.10 /pack	0	\$0
Mail letters	\$0.54 /letter	0	\$0

Subtotal Services \$3,055

REPRODUCTION

Photocopier	\$0.05 /page	1500	\$75
Aerial Photo repro	\$10.00 /photo	0	\$0
Blueline repro	\$1.00 /Sheet	0	\$0
Cronoflex Prod	\$5.50 /Sq Ft	0	\$0
3-ring binders	\$15.00 each	0	\$0
Color Copies	\$2.00 /page	0	\$0

Subtotal Reproduction \$75

Client: U.S. Army Corps of Engineers
Huntsville Division

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Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.4
Soil Investigations Summary
Surface Soil Sampling
Sub-Surface Soil Sampling
Test Pit Sampling

Prop No: 979002-00001

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00 /week		0	\$0	
Magnetometer	\$42.00 /week		0	\$0	
pH/Cond meter	\$50.00 /week		0	\$0	
Flow thru pH/Cond meter	\$257.00 /week		0	\$0	
DO meter	\$55.00 /week		0	\$0	
Soil Gas Supplies	\$50.00 /day		0	\$0	
Slug test eqt	\$50.00 /week		0	\$0	
Water level ind	\$40.00 /week		0	\$0	
Turbidimeter	\$30.00 /week		0	\$0	
Data Logger, Trnsdcr	\$135.00 /day		0	\$0	
Flow Meter	\$30.00 /week		0	\$0	
Water coolers	\$40.00 /month		1.25	\$50	
Equipment Trailer	\$1,000.00 /month		1.25	\$1,250	
Grundfus Redi Flow Pump	\$64.00 /day		0	\$0	
PUF Sampler	\$150.00 /week		0	\$0	
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0	
Hi- Vol Sampler	\$75.00 /week		2	\$150	
Hi- Vol Sampler Calibration Kit	\$25.00 /day		10	\$250	
Ponar Sediment Sampler	\$27.00 /day		0	\$0	
3.2 kw Generator	\$50.00 /day		0	\$0	
Seismograph	\$200.00 /day		0	\$0	
EM-31	\$85.00 /day		0	\$0	
GPR	\$500.00 /day		0	\$0	
Subtotal Rental				\$1,700	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00 /day		44	\$2,200	
Alpha Survey Meter	\$80.00 /week		6	\$480	
Alpha Scintillation Counter	\$100.00 /week		0	\$0	
Beta Sample Counter	\$100.00 /week		0	\$0	
Gas Proportional Detector	\$100.00 /week		0	\$0	
Gas Prop. Detector-Floor	\$100.00 /week		0	\$0	
Radon Monitor	\$300.00 /week		0	\$0	
Gamma Radiation Meter	\$50.00 /day		44	\$2,200	
Calib Gas	\$10.00 /day		44	\$440	
2-way radios	\$15.00 /ea/wk		8	\$120	
Air Purif Resp	\$20.00 /week		12	\$240	
10-Gal Eye Wash	\$35.00 /week		6	\$210	
Combination SCBA/SAR	\$150.00 /day		0	\$0	
Subtotal H & S				\$5,890	
SUBTOTAL OTHERS:				\$10,720	
SUBTOTAL LABOR & ODC'S:				\$108,531	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.4
Soil Investigations Summary
Surface Soil Sampling
Sub-Surface Soil Sampling
Test Pit Sampling

Prop No: 979002-00001

Unit				
Cost	Units	Quantity	Cost	Notes

SUBCONTRACTORS

GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Iron(Ferrous)	\$30.00 each	0	\$0
Sulfide	\$30.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (EPA 9060)	\$25.00 each	0	\$0
TOX (EPA 9056)	\$50.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
BOD	\$60.00 each	0	\$0
Sulfate(EPA 300)	\$25.00 each	0	\$0
COD	\$50.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Volatiles (EPA 524)	\$195.00 each	0	\$0
Hardness(EPA 130.2)	\$15.00 each	0	\$0
Alkalinity(EPA 310)	\$12.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (L. Kahn)	\$60.00 each	0	\$0
TOX (EPA 9056)	\$70.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

Subtotal Team Laboratory	\$0
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MISC. LABORATORY ANALYSIS

Grain Size Dist	\$120.00 each	0	\$0
TCLP	\$1,500.00 each	0	\$0
Moisture Content	\$15.00 each	0	\$0
Bulk Density	\$35.00 each	0	\$0
Chromium (Level II)	\$30.00 each	0	\$0
Total Suspended Solids	\$20.00 each	0	\$0
Total Dissolved Solids	\$20.00 each	0	\$0
Ammonia	\$25.00 each	0	\$0
Phosphate	\$25.00 each	0	\$0
Cation Exchange Capacity	\$100.00 each	0	\$0

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.4
Soil Investigations Summary
Surface Soil Sampling
Sub-Surface Soil Sampling
Test Pit Sampling

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
RADIOLOGICAL LABORATORY ANALYSIS					
Water Samples For:					
Thorium 232, 230, 227	\$60.00 each		0	\$0	
Uranium 238, 235, 233+234	\$60.00 each		0	\$0	
Radium 226,223	\$40.00 each		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00 each		0	\$0	
Plutonium 239 + 240	\$65.00 each		0	\$0	
Americium 241	\$65.00 each		0	\$0	
Gross Alpha&Beta	\$45.00 each		0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00 each		0	\$0	
Uranium 238, 235, 233+234	\$60.00 each		0	\$0	
Radium 226,223	\$40.00 each		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00 each		0	\$0	
Plutonium 239 + 240	\$65.00 each		0	\$0	
Americium 241	\$65.00 each		0	\$0	
Gamma Spectrometry	\$0.00 each		0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00 each		0	\$0	
Sample Prep/Return	\$0.00 each		0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00 each		0	\$0	
Uranium 238, 235, 233+234	\$60.00 each		0	\$0	
Radium 226,223	\$40.00 each		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00 each		0	\$0	
Plutonium 239 + 240	\$65.00 each		0	\$0	
Americium 241	\$65.00 each		0	\$0	
Gross Alpha&Beta	\$45.00 each		0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00 each		0	\$0	
Metals	\$150.00 each		0	\$0	
Radon (Alpha Film)	\$25.00 each		0	\$0	
Subtotal Misc. Laboratory				\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum each		13940	\$13,940	
Photogrammetry	Lump Sum each		0	\$0	
IDW Disposal	Lump Sum each		4995	\$4,995	
Surveyor	Lump Sum each		0	\$0	
Subtotal Investigation Subcontractors				\$18,935	
Subtotal Laboratory & Investigation Subcontractors:				\$18,935	
3% Mark-up:				\$568	
SUBTOTAL SUBCONTRACTORS:				\$19,503	
=====					
TASK TOTAL:				\$128,034	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.4.1
Surface Soil Sampling
131 SS @ 8 per day
(16 days)

Prop No: 979002-00001

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74 /hour		0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47 /hour		0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11 /hour		8	\$353	
Professional Level 5, Step 3 (P56)	\$37.99 /hour		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91 /hour		16	\$527	
Professional Level 5, Step 1 (P52)	\$29.39 /hour		0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13 /hour		0	\$0	
Professional Level 4, Step 1 (P42)	\$25.20 /hour		160	\$4,032	
Professional Level 3, Step 1 (P35)	\$24.04 /hour		0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09 /hour		0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89 /hour		0	\$0	
Professional Level 1, Step 2 (P18)	\$18.57 /hour		160	\$2,971	
Professional Level 1, Step 1 (P12)	\$14.84 /hour		0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10 /hour		0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58 /hour		160	\$2,653	
Technician Level 4, Step 1 (T42)	\$14.08 /hour		0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99 /hour		0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61 /hour		0	\$0	
Technician Level 2 (T25)	\$10.13 /hour		0	\$0	
Technician Level 1 (T15)	\$8.89 /hour		0	\$0	
Support Level 3 (S35)	\$20.61 /hour		0	\$0	
Support Level 2 (S25)	\$12.40 /hour		0	\$0	
Support Level 1 (S15)	\$8.72 /hour		0	\$0	
TOTAL HOURS/LABOR COST			504	\$10,535	
Contract Year: 1					
Base Yr					
Overhead Rate: 143%					
Labor Burden:				\$15,066	
SUBTOTAL BURDENED LABOR:				\$25,601	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.4.1
Surface Soil Sampling
131 SS @ 8 per day
(16 days)

Prop No: 979002-00001

	Unit			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
MATERIALS AND SUPPLIES				
Bottle labels	\$20.00	/roll	1	\$20
40 mL VOA Vials	\$122.74	/case	2	\$245
1 Liter Amber Bottles	\$37.95	/case	0	\$0
32 oz. HDPE Bottles	\$30.75	/case	0	\$0
Braided Nylon Rope	\$0.15	/foot	0	\$0
Bubble Pack	\$84.00	/roll	1	\$84
Decon Eqt	\$18.00	/kit	1	\$18
55g drums fill/mov	\$100.00	each	0	\$0
Field Notebook	\$14.00	each	1	\$14
Ice	\$1.00	/bag	20	\$20
Latex Gloves	\$10.00	/box	2	\$20
Methanol (Optima)	\$25.00	/bottle	1	\$25
Hexane (Optima)	\$25.00	/bottle	1	\$25
Acetone (Optima)	\$50.00	/bottle	1	\$50
HCl (Optima)	\$285.00	/bottle	1	\$285
HNO3 (Optima)	\$175.00	/bottle	1	\$175
Ascorbic Acid	\$10.00	/bottle	0	\$0
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0
Overboots	\$4.00	/pair	48	\$192
Respirator Cartridges	\$15.00	/pair	48	\$720
Packing Tape (doz)	\$72.00	/case	1	\$72
Padlocks	\$12.00	each	0	\$0
Sampling Tables	\$40.00	each	1	\$40
Radiological Badges	\$20.00	each	3	\$60
Aluminum Foil	\$1.00	/roll	0	\$0
Stain Stl bwl/spn	\$30.00	/set	1	\$30
Survey Stake/Flag	\$20.00	/bundle	2	\$40
Teflon tape	\$8.00	/roll	0	\$0
Tyveks	\$6.30	each	48	\$302
Water (HPLC Grade)	\$97.00	/case	2	\$194
Ziplock bags	\$3.00	/box	0	\$0
Calibration Gas	\$450.00	/tank	0	\$0
Ultra Pure Air	\$310.00	/ton	0	\$0
Teflon Tubing	\$120.00	/roll	0	\$0
Teflon Sheeting	\$500.00	/roll	0	\$0
Folding Live Traps	\$15.00	each	0	\$0
Glassware	\$25.00	each	0	\$0
Quartz Filters	\$10.00	each	0	\$0
Vermiculite Packing	\$16.00	/bag	16	\$256
SUBTOTAL MATLS & SUPPLIES:				\$2,888

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.4.1
Surface Soil Sampling
131 SS @ 8 per day
(16 days)

Prop No: 979002-00001

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
TRAVEL					
Airfare Boston\Syracuse	\$500.00 /trip		1	\$500	
Airfare Boston\Huntsville	\$900.00 /trip		0	\$0	
Subsistence-Seneca	\$96.00 /day		48	\$4,608	
Subsistence-Huntsville	\$89.00 /day		0	\$0	
Parking,Airport	\$13.00 /day		16	\$208	
Auto Rental	\$55.00 /day		16	\$880	
Suburban\Van rental	\$585.00 /week		2	\$1,170	
Mileage	\$0.31 /mile		150	\$47	
SUBTOTAL TRAVEL:				\$7,413	

OTHERS

IN-HOUSE SERVICES

Telephone	\$4.00 /call	20	\$80
Word Proc/PC	\$3.70 /hour	0	\$0
CADD	\$5.00 /hour	0	\$0
Facsimile	\$1.00 /page	50	\$50
Overnight Express			
Letter/2 lb pack	\$14.50 each	0	\$0
Package (50 lbs)	\$96.25 each	8	\$770
Mail 4-lb pack	\$4.10 /pack	0	\$0
Mail letters	\$0.54 /letter	0	\$0

Subtotal Services \$900

REPRODUCTION

Photocopier	\$0.05 /page	500	\$25
Aerial Photo repro	\$10.00 /photo	0	\$0
Blueline repro	\$1.00 /Sheet	0	\$0
Cronoflex Prod	\$5.50 /Sq Ft	0	\$0
3-ring binders	\$15.00 each	0	\$0
Color Copies	\$2.00 /page	0	\$0

Subtotal Reproduction \$25

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.4.1
Surface Soil Sampling
131 SS @ 8 per day
(16 days)

Prop No: 979002-00001

	<u>Unit</u>			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
<u>Notes</u>				
EQUIPMENT RENTAL				
EARTH SCIENCES EQUIPMENT				
Bailer	\$55.00 /week		0	\$0
Magnetometer	\$42.00 /week		0	\$0
pH/Cond meter	\$50.00 /week		0	\$0
Flow thru pH/Cond meter	\$257.00 /week		0	\$0
DO meter	\$55.00 /week		0	\$0
Soil Gas Supplies	\$50.00 /day		0	\$0
Slug test eqt	\$50.00 /week		0	\$0
Water level ind	\$40.00 /week		0	\$0
Turbidimeter	\$30.00 /week		0	\$0
Data Logger, Trnsdcr	\$135.00 /day		0	\$0
Flow Meter	\$30.00 /week		0	\$0
Water coolers	\$40.00 /month		0.5	\$20
Equipment Trailer	\$1,000.00 /month		0.5	\$500
Grundfus Redi Flow Pump	\$64.00 /day		0	\$0
PUF Sampler	\$150.00 /week		0	\$0
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0
Hi- Vol Sampler	\$75.00 /week		0	\$0
Hi- Vol Sampler Calibration Kit	\$25.00 /day		0	\$0
Ponar Sediment Sampler	\$27.00 /day		0	\$0
3.2 kw Generator	\$50.00 /day		0	\$0
Seismograph	\$200.00 /day		0	\$0
EM-31	\$85.00 /day		0	\$0
GPR	\$500.00 /day		0	\$0
Subtotal Rental				\$520
HEALTH & SAFETY EQUIPMENT				
HNu Meter	\$50.00 /day		16	\$800
Alpha Survey Meter	\$80.00 /week		2	\$160
Alpha Scintillation Counter	\$100.00 /week		0	\$0
Beta Sample Counter	\$100.00 /week		0	\$0
Gas Proportional Detector	\$100.00 /week		0	\$0
Gas Prop. Detector-Floor	\$100.00 /week		0	\$0
Radon Monitor	\$300.00 /week		0	\$0
Gamma Radiation Meter	\$50.00 /day		16	\$800
Calib Gas	\$10.00 /day		16	\$160
2-way radios	\$15.00 /ea/wk		2	\$30
Air Purif Resp	\$20.00 /week		6	\$120
10-Gal Eye Wash	\$35.00 /week		2	\$70
Combination SCBA/SAR	\$150.00 /day		0	\$0
Subtotal H & S				\$2,140
SUBTOTAL OTHERS:				\$3,585
SUBTOTAL LABOR & ODC'S:				\$39,486

Client: U.S. Army Corps of Engineers Printed: 22-Mar-96
Huntsville Division
Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E
Prop No: 979002-00001

Parsons Engineering Science, Inc.

Task # 2.4.1
Surface Soil Sampling
131 SS @ 8 per day
(16 days)

Unit	Cost	Units	Quantity	Cost	Notes
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SUBCONTRACTORS

GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Iron(Ferrous)	\$30.00 each	0	\$0
Sulfide	\$30.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (EPA 9060)	\$25.00 each	0	\$0
TOX (EPA 9056)	\$50.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
BOD	\$60.00 each	0	\$0
Sulfate(EPA 300)	\$25.00 each	0	\$0
COD	\$50.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Volatiles (EPA 524)	\$195.00 each	0	\$0
Hardness(EPA 130.2)	\$15.00 each	0	\$0
Alkalinity(EPA 310)	\$12.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (L. Kahn)	\$60.00 each	0	\$0
TOX (EPA 9056)	\$70.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

Subtotal Team Laboratory \$0

MISC. LABORATORY ANALYSIS

Grain Size Dist	\$120.00 each	0	\$0
TCLP	\$1,500.00 each	0	\$0
Moisture Content	\$15.00 each	0	\$0
Bulk Density	\$35.00 each	0	\$0
Chromium (Level II)	\$30.00 each	0	\$0
Total Suspended Solids	\$20.00 each	0	\$0
Total Dissolved Solids	\$20.00 each	0	\$0
Ammonia	\$25.00 each	0	\$0
Phosphate	\$25.00 each	0	\$0
Cation Exchange Capacity	\$100.00 each	0	\$0

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.4.1
Surface Soil Sampling
131 SS @ 8 per day
(16 days)

Prop No: 979002-00001

	<u>Unit</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
RADIOLOGICAL LABORATORY ANALYSIS					
Water Samples For:					
Thorium 232, 230, 227	\$60.00 each		0	\$0	
Uranium 238, 235, 233+234	\$60.00 each		0	\$0	
Radium 226,223	\$40.00 each		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00 each		0	\$0	
Plutonium 239 + 240	\$65.00 each		0	\$0	
Americium 241	\$65.00 each		0	\$0	
Gross Alpha&Beta	\$45.00 each		0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00 each		0	\$0	
Uranium 238, 235, 233+234	\$60.00 each		0	\$0	
Radium 226,223	\$40.00 each		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00 each		0	\$0	
Plutonium 239 + 240	\$65.00 each		0	\$0	
Americium 241	\$65.00 each		0	\$0	
Gamma Spectrometry	\$0.00 each		0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00 each		0	\$0	
Sample Prep/Return	\$0.00 each		0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00 each		0	\$0	
Uranium 238, 235, 233+234	\$60.00 each		0	\$0	
Radium 226,223	\$40.00 each		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00 each		0	\$0	
Plutonium 239 + 240	\$65.00 each		0	\$0	
Americium 241	\$65.00 each		0	\$0	
Gross Alpha&Beta	\$45.00 each		0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00 each		0	\$0	
Metals	\$150.00 each		0	\$0	
Radon (Alpha Film)	\$25.00 each		0	\$0	
Subtotal Misc. Laboratory				\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum each		0	\$0	
Photogrammetry	Lump Sum each		0	\$0	
IDW Disposal	Lump Sum each		0	\$0	
Surveyor	Lump Sum each		0	\$0	
Subtotal Investigation Subcontractors				\$0	
Subtotal Laboratory & Investigation Subcontractors:				\$0	
3% Mark-up:				\$0	
SUBTOTAL SUBCONTRACTORS:				\$0	
=====					
TASK TOTAL:				\$39,486	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.4.2
Sub-Surface Soil Sampling
37 Borings @ 2 per day
(18.5 days)

Prop No: 979002-00001

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
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LABOR COSTS

ENGINEERS AND SCIENTISTS

Professional Level 6, Step 2 (P68)	\$58.74 /hour	0	\$0
Professional Level 6, Step 1 (P62)	\$46.47 /hour	0	\$0
Professional Level 5, Step 4 (P58)	\$44.11 /hour	8	\$353
Professional Level 5, Step 3 (P56)	\$37.99 /hour	0	\$0
Professional Level 5, Step 2 (P54)	\$32.91 /hour	16	\$527
Professional Level 5, Step 1 (P52)	\$29.39 /hour	0	\$0
Professional Level 4, Step 2 (P48)	\$29.13 /hour	0	\$0
Professional Level 4, Step 1 (P42)	\$25.20 /hour	185	\$4,662
Professional Level 3, Step 1 (P35)	\$24.04 /hour	0	\$0
Professional Level 2, Step 2 (P28)	\$23.09 /hour	0	\$0
Professional Level 2, Step 1 (P22)	\$19.89 /hour	0	\$0
Professional Level 1, Step 2 (P18)	\$18.57 /hour	185	\$3,435
Professional Level 1, Step 1 (P12)	\$14.84 /hour	0	\$0

TECHNICAL AND SUPPORT SPECIALISTS

Technician Level 5 (T55)	\$21.10 /hour	0	\$0
Technician Level 4, Step 2 (T48)	\$16.58 /hour	185	\$3,067
Technician Level 4, Step 1 (T42)	\$14.08 /hour	0	\$0
Technician Level 3, Step 2 (T38)	\$13.99 /hour	0	\$0
Technician Level 3, Step 1 (T32)	\$11.61 /hour	0	\$0
Technician Level 2 (T25)	\$10.13 /hour	0	\$0
Technician Level 1 (T15)	\$8.89 /hour	0	\$0
Support Level 3 (S35)	\$20.61 /hour	0	\$0
Support Level 2 (S25)	\$12.40 /hour	0	\$0
Support Level 1 (S15)	\$8.72 /hour	0	\$0

TOTAL HOURS/LABOR COST

579	\$12,044
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Contract Year: 1
Base Yr

Overhead Rate: 143%

Labor Burden: \$17,223

SUBTOTAL BURDENED LABOR: \$29,267

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.4.2
Sub-Surface Soil Sampling
37 Borings @ 2 per day
(18.5 days)

Prop No: 979002-00001

	<u>Unit</u>			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
MATERIALS AND SUPPLIES				
Bottle labels	\$20.00	/roll	1	\$20
40 mL VOA Vials	\$122.74	/case	1	\$123
1 Liter Amber Bottles	\$37.95	/case	4	\$152
32 oz. HDPE Bottles	\$30.75	/case	0	\$0
Braided Nylon Rope	\$0.15	/foot	0	\$0
Bubble Pack	\$84.00	/roll	1	\$84
Decon Eqt	\$18.00	/kit	1	\$18
55g drums fill/mov	\$100.00	each	0	\$0
Field Notebook	\$14.00	each	1	\$14
Ice	\$1.00	/bag	10	\$10
Latex Gloves	\$10.00	/box	2	\$20
Methanol (Optima)	\$25.00	/bottle	0	\$0
Hexane (Optima)	\$25.00	/bottle	0	\$0
Acetone (Optima)	\$50.00	/bottle	0	\$0
HCl (Optima)	\$285.00	/bottle	0	\$0
HNO3 (Optima)	\$175.00	/bottle	0	\$0
Ascorbic Acid	\$10.00	/bottle	0	\$0
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0
Overboots	\$4.00	/pair	54	\$216
Respirator Cartridges	\$15.00	/pair	54	\$810
Packing Tape (doz)	\$72.00	/case	1	\$72
Padlocks	\$12.00	each	0	\$0
Sampling Tables	\$40.00	each	0	\$0
Radiological Badges	\$20.00	each	0	\$0
Aluminum Foil	\$1.00	/roll	0	\$0
Stain Stl bwl/spn	\$30.00	/set	1	\$30
Survey Stake/Flag	\$20.00	/bundle	2	\$40
Teflon tape	\$8.00	/roll	0	\$0
Tyveks	\$6.30	each	54	\$340
Water (HPLC Grade)	\$97.00	/case	2	\$194
Ziplock bags	\$3.00	/box	0	\$0
Calibration Gas	\$450.00	/tank	0	\$0
Ultra Pure Air	\$310.00	/ton	0	\$0
Teflon Tubing	\$120.00	/roll	0	\$0
Teflon Sheeting	\$500.00	/roll	0	\$0
Folding Live Traps	\$15.00	each	0	\$0
Glassware	\$25.00	each	0	\$0
Quartz Filters	\$10.00	each	0	\$0
Vermiculite Packing	\$16.00	/bag	16	\$256
SUBTOTAL MATLS & SUPPLIES:				\$2,399

Client:	U.S. Army Corps of Engineers	Printed:	22-Mar-96	Parsons Engineering Science, Inc.
	Huntsville Division			
Project:	Seneca Army Depot Activity, Romulus New York		Task # 2.4.2	
	RI/FS at the Radiological Disposal Areas		Sub-Surface Soil Sampling	
	SEAD-12		37 Borings @ 2 per day	
	Annex E		(18.5 days)	
Prop No:	979002-00001			

	Unit			
	Cost	Units	Quantity	Cost
TRAVEL				
Airfare Boston\Syracuse	\$500.00	/trip	0	\$0
Airfare Boston\Huntsville	\$900.00	/trip	0	\$0
Subsistence-Seneca	\$96.00	/day	54	\$5,184
Subsistence-Huntsville	\$89.00	/day	0	\$0
Parking,Airport	\$13.00	/day	0	\$0
Auto Rental	\$55.00	/day	18	\$990
Suburban\Van rental	\$585.00	/week	2.5	\$1,463
Mileage	\$0.31	/mile	150	\$47
SUBTOTAL TRAVEL:				\$7,683

OTHERS

IN-HOUSE SERVICES

Telephone	\$4.00	/call	20	\$80
Word Proc/PC	\$3.70	/hour	0	\$0
CADD	\$5.00	/hour	0	\$0
Facsimile	\$1.00	/page	50	\$50
Overnight Express				
Letter/2 lb pack	\$14.50	each	0	\$0
Package (50 lbs)	\$96.25	each	10	\$963
Mail 4-lb pack	\$4.10	/pack	0	\$0
Mail letters	\$0.54	/letter	0	\$0

Subtotal Services	\$1,093
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REPRODUCTION

Photocopier	\$0.05	/page	500	\$25
Aerial Photo repro	\$10.00	/photo	0	\$0
Blueline repro	\$1.00	/Sheet	0	\$0
Cronoflex Prod	\$5.50	/Sq Ft	0	\$0
3-ring binders	\$15.00	each	0	\$0
Color Copies	\$2.00	/page	0	\$0

Subtotal Reproduction	\$25
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Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.4.2
Sub-Surface Soil Sampling
37 Borings @ 2 per day
(18.5 days)

Prop No: 979002-00001

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00 /week		0	\$0	
Magnetometer	\$42.00 /week		0	\$0	
pH/Cond meter	\$50.00 /week		0	\$0	
Flow thru pH/Cond meter	\$257.00 /week		0	\$0	
DO meter	\$55.00 /week		0	\$0	
Soil Gas Supplies	\$50.00 /day		0	\$0	
Slug test eqt	\$50.00 /week		0	\$0	
Water level ind	\$40.00 /week		0	\$0	
Turbidimeter	\$30.00 /week		0	\$0	
Data Logger, Trnsdcr	\$135.00 /day		0	\$0	
Flow Meter	\$30.00 /week		0	\$0	
Water coolers	\$40.00 /month		0.5	\$20	
Equipment Trailer	\$1,000.00 /month		0.5	\$500	
Grundfus Redi Flow Pump	\$64.00 /day		0	\$0	
PUF Sampler	\$150.00 /week		0	\$0	
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0	
Hi- Vol Sampler	\$75.00 /week		0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00 /day		0	\$0	
Ponar Sediment Sampler	\$27.00 /day		0	\$0	
3.2 kw Generator	\$50.00 /day		0	\$0	
Seismograph	\$200.00 /day		0	\$0	
EM-31	\$85.00 /day		0	\$0	
GPR	\$500.00 /day		0	\$0	

Subtotal Rental				<u>\$520</u>	
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HEALTH & SAFETY EQUIPMENT

HNu Meter	\$50.00 /day	18	\$900	
Alpha Survey Meter	\$80.00 /week	2	\$160	
Alpha Scintillation Counter	\$100.00 /week	0	\$0	
Beta Sample Counter	\$100.00 /week	0	\$0	
Gas Proportional Detector	\$100.00 /week	0	\$0	
Gas Prop. Detector-Floor	\$100.00 /week	0	\$0	
Radon Monitor	\$300.00 /week	0	\$0	
Gamma Radiation Meter	\$50.00 /day	18	\$900	
Calib Gas	\$10.00 /day	18	\$180	
2-way radios	\$15.00 /ea/wk	2	\$30	
Air Purif Resp	\$20.00 /week	0	\$0	
10-Gal Eye Wash	\$35.00 /week	2	\$70	
Combination SCBA/SAR	\$150.00 /day	0	\$0	

Subtotal H & S				<u>\$2,240</u>	
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SUBTOTAL OTHERS: \$3,878

SUBTOTAL LABOR & ODC'S: \$43,227

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.4.2
Sub-Surface Soil Sampling
37 Borings @ 2 per day
(18.5 days)

Prop No: 979002-00001

	<u>Unit</u>			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
				<u>Notes</u>
SUBCONTRACTORS				
GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS				
Volatiles (TCL)	\$180.00	each	0	\$0
B/N/A (TCL)	\$400.00	each	0	\$0
Pest./PCBs (TCL)	\$180.00	each	0	\$0
Total Metals & CN(TAL)	\$170.00	each	0	\$0
Iron(Ferrous)	\$30.00	each	0	\$0
Sulfide	\$30.00	each	0	\$0
Spec Cond(EPA 9050)	\$8.00	each	0	\$0
Total Organic Carbon (EPA 9060)	\$25.00	each	0	\$0
TOX (EPA 9056)	\$50.00	each	0	\$0
Chloride(EPA 9250)	\$25.00	each	0	\$0
BOD	\$60.00	each	0	\$0
Sulfate(EPA 300)	\$25.00	each	0	\$0
COD	\$50.00	each	0	\$0
pH (EPA 9045)	\$8.00	each	0	\$0
Volatiles (EPA 524)	\$195.00	each	0	\$0
Hardness(EPA 130.2)	\$15.00	each	0	\$0
Alkalinity(EPA 310)	\$12.00	each	0	\$0
Nitrate (EPA 353.2)	\$20.00	each	0	\$0
SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS				
Volatiles (TCL)	\$180.00	each	0	\$0
B/N/A (TCL)	\$400.00	each	0	\$0
Pest./PCBs (TCL)	\$180.00	each	0	\$0
Total Metals & CN(TAL)	\$170.00	each	0	\$0
Spec Cond(EPA 9050)	\$8.00	each	0	\$0
Total Organic Carbon (L. Kahn)	\$60.00	each	0	\$0
TOX (EPA 9056)	\$70.00	each	0	\$0
Chloride(EPA 9250)	\$25.00	each	0	\$0
pH (EPA 9045)	\$8.00	each	0	\$0
Nitrate (EPA 353.2)	\$20.00	each	0	\$0
Subtotal Team Laboratory				\$0
MISC. LABORATORY ANALYSIS				
Grain Size Dist	\$120.00	each	0	\$0
TCLP	\$1,500.00	each	0	\$0
Moisture Content	\$15.00	each	0	\$0
Bulk Density	\$35.00	each	0	\$0
Chromium (Level II)	\$30.00	each	0	\$0
Total Suspended Solids	\$20.00	each	0	\$0
Total Dissolved Solids	\$20.00	each	0	\$0
Ammonia	\$25.00	each	0	\$0
Phosphate	\$25.00	each	0	\$0
Cation Exchange Capacity	\$100.00	each	0	\$0

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.4.2
Sub-Surface Soil Sampling
37 Borings @ 2 per day
(18.5 days)

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
RADIOLOGICAL LABORATORY ANALYSIS					
Water Samples For:					
Thorium 232, 230, 227	\$60.00 each		0	\$0	
Uranium 238, 235, 233+234	\$60.00 each		0	\$0	
Radium 226,223	\$40.00 each		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00 each		0	\$0	
Plutonium 239 + 240	\$65.00 each		0	\$0	
Americium 241	\$65.00 each		0	\$0	
Gross Alpha&Beta	\$45.00 each		0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00 each		0	\$0	
Uranium 238, 235, 233+234	\$60.00 each		0	\$0	
Radium 226,223	\$40.00 each		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00 each		0	\$0	
Plutonium 239 + 240	\$65.00 each		0	\$0	
Americium 241	\$65.00 each		0	\$0	
Gamma Spectrometry	\$0.00 each		0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00 each		0	\$0	
Sample Prep/Return	\$0.00 each		0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00 each		0	\$0	
Uranium 238, 235, 233+234	\$60.00 each		0	\$0	
Radium 226,223	\$40.00 each		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00 each		0	\$0	
Plutonium 239 + 240	\$65.00 each		0	\$0	
Americium 241	\$65.00 each		0	\$0	
Gross Alpha&Beta	\$45.00 each		0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00 each		0	\$0	
Metals	\$150.00 each		0	\$0	
Radon (Alpha Film)	\$25.00 each		0	\$0	
Subtotal Misc. Laboratory				\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum each		8220	\$8,220	
Photogrammetry	Lump Sum each		0	\$0	
IDW Disposal	Lump Sum each		4995	\$4,995	
Surveyor	Lump Sum each		0	\$0	
Subtotal Investigation Subcontractors				\$13,215	
Subtotal Laboratory & Investigation Subcontractors:				\$13,215	
3% Mark-up:				\$396	
SUBTOTAL SUBCONTRACTORS:				\$13,611	
TASK TOTAL:				\$56,838	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.4.3
Test Pit Investigations
20 TPs@2/dy=10dys

Prop No: 979002-00001

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74 /hour		0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47 /hour		0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11 /hour		8	\$353	
Professional Level 5, Step 3 (P56)	\$37.99 /hour		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91 /hour		16	\$527	
Professional Level 5, Step 1 (P52)	\$29.39 /hour		0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13 /hour		0	\$0	
Professional Level 4, Step 1 (P42)	\$25.20 /hour		100	\$2,520	
Professional Level 3, Step 1 (P35)	\$24.04 /hour		0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09 /hour		0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89 /hour		0	\$0	
Professional Level 1, Step 2 (P18)	\$18.57 /hour		100	\$1,857	
Professional Level 1, Step 1 (P12)	\$14.84 /hour		0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10 /hour		0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58 /hour		100	\$1,658	
Technician Level 4, Step 1 (T42)	\$14.08 /hour		0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99 /hour		0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61 /hour		0	\$0	
Technician Level 2 (T25)	\$10.13 /hour		0	\$0	
Technician Level 1 (T15)	\$8.89 /hour		0	\$0	
Support Level 3 (S35)	\$20.61 /hour		0	\$0	
Support Level 2 (S25)	\$12.40 /hour		0	\$0	
Support Level 1 (S15)	\$8.72 /hour		0	\$0	
TOTAL HOURS/LABOR COST			324	\$6,914	
Contract Year: 1					
Base Yr					
Overhead Rate: 143%					
Labor Burden:				\$9,888	
SUBTOTAL BURDENED LABOR:				\$16,802	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.4.3
Test Pit Investigations
20 TPs@2/dy=10dys

Prop No: 979002-00001

	Unit			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
MATERIALS AND SUPPLIES				
Bottle labels	\$20.00	/roll	1	\$20
40 mL VOA Vials	\$122.74	/case	1	\$123
1 Liter Amber Bottles	\$37.95	/case	4	\$152
32 oz. HDPE Bottles	\$30.75	/case	0	\$0
Braided Nylon Rope	\$0.15	/foot	0	\$0
Bubble Pack	\$84.00	/roll	1	\$84
Decon Eqt	\$18.00	/kit	1	\$18
55g drums fill/mov	\$100.00	each	0	\$0
Field Notebook	\$14.00	each	1	\$14
Ice	\$1.00	/bag	10	\$10
Latex Gloves	\$10.00	/box	2	\$20
Methanol (Optima)	\$25.00	/bottle	0	\$0
Hexane (Optima)	\$25.00	/bottle	0	\$0
Acetone (Optima)	\$50.00	/bottle	0	\$0
HCl (Optima)	\$285.00	/bottle	0	\$0
HNO3 (Optima)	\$175.00	/bottle	0	\$0
Ascorbic Acid	\$10.00	/bottle	0	\$0
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0
Overboots	\$4.00	/pair	30	\$120
Respirator Cartridges	\$15.00	/pair	30	\$450
Packing Tape (doz)	\$72.00	/case	1	\$72
Padlocks	\$12.00	each	0	\$0
Sampling Tables	\$40.00	each	1	\$40
Radiological Badges	\$20.00	each	3	\$60
Aluminum Foil	\$1.00	/roll	0	\$0
Stain Stl bwl/spn	\$30.00	/set	1	\$30
Survey Stake/Flag	\$20.00	/bundle	1	\$20
Teflon tape	\$8.00	/roll	0	\$0
Tyveks	\$6.30	each	30	\$189
Water (HPLC Grade)	\$97.00	/case	2	\$194
Ziplock bags	\$3.00	/box	0	\$0
Calibration Gas	\$450.00	/tank	0	\$0
Ultra Pure Air	\$310.00	/ton	0	\$0
Teflon Tubing	\$120.00	/roll	0	\$0
Teflon Sheeting	\$500.00	/roll	0	\$0
Folding Live Traps	\$15.00	each	0	\$0
Glassware	\$25.00	each	0	\$0
Quartz Filters	\$10.00	each	0	\$0
Vermiculite Packing	\$16.00	/bag	8	\$128
SUBTOTAL MATLS & SUPPLIES:				\$1,744

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.4.3
Test Pit Investigations
20 TPs@2/dy=10dys

Prop No: 979002-00001

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
TRAVEL					
Airfare Boston\Syracuse	\$500.00 /trip		0	\$0	
Airfare Boston\Huntsville	\$900.00 /trip		0	\$0	
Subsistence-Seneca	\$96.00 /day		30	\$2,880	
Subsistence-Huntsville	\$89.00 /day		0	\$0	
Parking,Airport	\$13.00 /day		0	\$0	
Auto Rental	\$55.00 /day		10	\$550	
Suburban\Van rental	\$585.00 /week		1	\$585	
Mileage	\$0.31 /mile		0	\$0	
SUBTOTAL TRAVEL:				\$4,015	

OTHERS

IN-HOUSE SERVICES

Telephone	\$4.00 /call	20	\$80
Word Proc/PC	\$3.70 /hour	0	\$0
CADD	\$5.00 /hour	0	\$0
Facsimile	\$1.00 /page	20	\$20
Overnight Express			
Letter/2 lb pack	\$14.50 each	0	\$0
Package (50 lbs)	\$96.25 each	10	\$963
Mail 4-lb pack	\$4.10 /pack	0	\$0
Mail letters	\$0.54 /letter	0	\$0

Subtotal Services \$1,063

REPRODUCTION

Photocopier	\$0.05 /page	500	\$25
Aerial Photo repro	\$10.00 /photo	0	\$0
Blueline repro	\$1.00 /Sheet	0	\$0
Cronoflex Prod	\$5.50 /Sq Ft	0	\$0
3-ring binders	\$15.00 each	0	\$0
Color Copies	\$2.00 /page	0	\$0

Subtotal Reproduction \$25

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.4.3
Test Pit Investigations
20 TPs@2/dy=10dys

Prop No: 979002-00001

	<u>Unit</u>			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
<u>Notes</u>				
EQUIPMENT RENTAL				
EARTH SCIENCES EQUIPMENT				
Bailer	\$55.00 /week		0	\$0
Magnetometer	\$42.00 /week		0	\$0
pH/Cond meter	\$50.00 /week		0	\$0
Flow thru pH/Cond meter	\$257.00 /week		0	\$0
DO meter	\$55.00 /week		0	\$0
Soil Gas Supplies	\$50.00 /day		0	\$0
Slug test eqt	\$50.00 /week		0	\$0
Water level ind	\$40.00 /week		0	\$0
Turbidimeter	\$30.00 /week		0	\$0
Data Logger, Trnsdcr	\$135.00 /day		0	\$0
Flow Meter	\$30.00 /week		0	\$0
Water coolers	\$40.00 /month		0.25	\$10
Equipment Trailer	\$1,000.00 /month		0.25	\$250
Grundfus Redi Flow Pump	\$64.00 /day		0	\$0
PUF Sampler	\$150.00 /week		0	\$0
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0
Hi- Vol Sampler	\$75.00 /week		2	\$150
Hi- Vol Sampler Calibration Kit	\$25.00 /day		10	\$250
Ponar Sediment Sampler	\$27.00 /day		0	\$0
3.2 kw Generator	\$50.00 /day		0	\$0
Seismograph	\$200.00 /day		0	\$0
EM-31	\$85.00 /day		0	\$0
GPR	\$500.00 /day		0	\$0
Subtotal Rental				\$660
HEALTH & SAFETY EQUIPMENT				
HNu Meter	\$50.00 /day		10	\$500
Alpha Survey Meter	\$80.00 /week		2	\$160
Alpha Scintillation Counter	\$100.00 /week		0	\$0
Beta Sample Counter	\$100.00 /week		0	\$0
Gas Proportional Detector	\$100.00 /week		0	\$0
Gas Prop. Detector-Floor	\$100.00 /week		0	\$0
Radon Monitor	\$300.00 /week		0	\$0
Gamma Radiation Meter	\$50.00 /day		10	\$500
Calib Gas	\$10.00 /day		10	\$100
2-way radios	\$15.00 /ea/wk		4	\$60
Air Purif Resp	\$20.00 /week		6	\$120
10-Gal Eye Wash	\$35.00 /week		2	\$70
Combination SCBA/SAR	\$150.00 /day		0	\$0
Subtotal H & S				\$1,510
SUBTOTAL OTHERS:				\$3,258
SUBTOTAL LABOR & ODC'S:				\$25,818

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.4.3
Test Pit Investigations
20 TPs@2/dy=10dys

Prop No: 979002-00001

	<u>Unit</u>				
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
SUBCONTRACTORS					
GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS					
Volatiles (TCL)	\$180.00	each	0	\$0	
B/N/A (TCL)	\$400.00	each	0	\$0	
Pest./PCBs (TCL)	\$180.00	each	0	\$0	
Total Metals & CN(TAL)	\$170.00	each	0	\$0	
Iron(Ferrous)	\$30.00	each	0	\$0	
Sulfide	\$30.00	each	0	\$0	
Spec Cond(EPA 9050)	\$8.00	each	0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00	each	0	\$0	
TOX (EPA 9056)	\$50.00	each	0	\$0	
Chloride(EPA 9250)	\$25.00	each	0	\$0	
BOD	\$60.00	each	0	\$0	
Sulfate(EPA 300)	\$25.00	each	0	\$0	
COD	\$50.00	each	0	\$0	
pH (EPA 9045)	\$8.00	each	0	\$0	
Volatiles (EPA 524)	\$195.00	each	0	\$0	
Hardness(EPA 130.2)	\$15.00	each	0	\$0	
Alkalinity(EPA 310)	\$12.00	each	0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS					
Volatiles (TCL)	\$180.00	each	0	\$0	
B/N/A (TCL)	\$400.00	each	0	\$0	
Pest./PCBs (TCL)	\$180.00	each	0	\$0	
Total Metals & CN(TAL)	\$170.00	each	0	\$0	
Spec Cond(EPA 9050)	\$8.00	each	0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00	each	0	\$0	
TOX (EPA 9056)	\$70.00	each	0	\$0	
Chloride(EPA 9250)	\$25.00	each	0	\$0	
pH (EPA 9045)	\$8.00	each	0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
Subtotal Team Laboratory				\$0	
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00	each	0	\$0	
TCLP	\$1,500.00	each	0	\$0	
Moisture Content	\$15.00	each	0	\$0	
Bulk Density	\$35.00	each	0	\$0	
Chromium (Level II)	\$30.00	each	0	\$0	
Total Suspended Solids	\$20.00	each	0	\$0	
Total Dissolved Solids	\$20.00	each	0	\$0	
Ammonia	\$25.00	each	0	\$0	
Phosphate	\$25.00	each	0	\$0	
Cation Exchange Capacity	\$100.00	each	0	\$0	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.4.3
Test Pit Investigations
20 TPs@2/dy=10dys

Prop No: 979002-00001

	Unit			
	Cost	Units	Quantity	Cost
Notes				
RADIOLOGICAL LABORATORY ANALYSIS				
Water Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gross Alpha&Beta	\$45.00	each	0	\$0
Soil Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gamma Spectrometry	\$0.00	each	0	\$0
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0
Sample Prep/Return	\$0.00	each	0	\$0
Wipe Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gross Alpha&Beta	\$45.00	each	0	\$0
AIR SAMPLES LABORATORY ANALYSIS				
SVOC's	\$490.00	each	0	\$0
Metals	\$150.00	each	0	\$0
Radon (Alpha Film)	\$25.00	each	0	\$0
Subtotal Misc. Laboratory				\$0
INVESTIGATION SUBCONTRACTORS				
Driller	Lump Sum	each	5720	\$5,720
Photogrammetry	Lump Sum	each	0	\$0
IDW Disposal	Lump Sum	each	0	\$0
Surveyor	Lump Sum	each	0	\$0
Subtotal Investigation Subcontractors				\$5,720
Subtotal Laboratory & Investigation Subcontractors:				\$5,720
3% Mark-up:				\$172
SUBTOTAL SUBCONTRACTORS:				\$5,892
TASK TOTAL:				\$31,710

Client: U.S. Army Corps of Engineers Huntsville Division	Printed: 22-Mar-96	Parsons Engineering Science, Inc.
Project: Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas SEAD-12 Annex E		Task # 2.5 Surface Water and Sediment Sampling 43 Samples @ 4 per day (10 Days)
Prop No: 979002-00001		

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
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LABOR COSTS

ENGINEERS AND SCIENTISTS

Professional Level 6, Step 2 (P68)	\$58.74 /hour	0	\$0
Professional Level 6, Step 1 (P62)	\$46.47 /hour	0	\$0
Professional Level 5, Step 4 (P58)	\$44.11 /hour	8	\$353
Professional Level 5, Step 3 (P56)	\$37.99 /hour	0	\$0
Professional Level 5, Step 2 (P54)	\$32.91 /hour	8	\$263
Professional Level 5, Step 1 (P52)	\$29.39 /hour	0	\$0
Professional Level 4, Step 2 (P48)	\$29.13 /hour	0	\$0
Professional Level 4, Step 1 (P42)	\$25.20 /hour	100	\$2,520
Professional Level 3, Step 1 (P35)	\$24.04 /hour	0	\$0
Professional Level 2, Step 2 (P28)	\$23.09 /hour	0	\$0
Professional Level 2, Step 1 (P22)	\$19.89 /hour	0	\$0
Professional Level 1, Step 2 (P18)	\$18.57 /hour	100	\$1,857
Professional Level 1, Step 1 (P12)	\$14.84 /hour	0	\$0

TECHNICAL AND SUPPORT SPECIALISTS

Technician Level 5 (T55)	\$21.10 /hour	0	\$0
Technician Level 4, Step 2 (T48)	\$16.58 /hour	100	\$1,658
Technician Level 4, Step 1 (T42)	\$14.08 /hour	0	\$0
Technician Level 3, Step 2 (T38)	\$13.99 /hour	0	\$0
Technician Level 3, Step 1 (T32)	\$11.61 /hour	0	\$0
Technician Level 2 (T25)	\$10.13 /hour	0	\$0
Technician Level 1 (T15)	\$8.89 /hour	0	\$0
Support Level 3 (S35)	\$20.61 /hour	0	\$0
Support Level 2 (S25)	\$12.40 /hour	0	\$0
Support Level 1 (S15)	\$8.72 /hour	0	\$0

TOTAL HOURS/LABOR COST	316	\$6,651
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Contract Year: 1

Base Yr

Overhead Rate: 143%

Labor Burden: \$9,511

SUBTOTAL BURDENED LABOR: \$16,162

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.5
Surface Water and
Sediment Sampling
43 Samples @ 4 per day
(10 Days)

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00 /roll		1	\$20	
40 mL VOA Vials	\$122.74 /case		2	\$245	
1 Liter Amber Bottles	\$37.95 /case		4	\$152	
32 oz. HDPE Bottles	\$30.75 /case		0	\$0	
Braided Nylon Rope	\$0.15 /foot		0	\$0	
Bubble Pack	\$84.00 /roll		1	\$84	
Decon Eqt	\$18.00 /kit		1	\$18	
55g drums fill/mov	\$100.00 each		0	\$0	
Field Notebook	\$14.00 each		1	\$14	
Ice	\$1.00 /bag		10	\$10	
Latex Gloves	\$10.00 /box		1	\$10	
Methanol (Optima)	\$25.00 /bottle		1	\$25	
Hexane (Optima)	\$25.00 /bottle		0	\$0	
Acetone (Optima)	\$50.00 /bottle		0	\$0	
HCl (Optima)	\$285.00 /bottle		1	\$285	
HNO3 (Optima)	\$175.00 /bottle		1	\$175	
Ascorbic Acid	\$10.00 /bottle		0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00 /box		0	\$0	
Overboots	\$4.00 /pair		18	\$72	
Respirator Cartridges	\$15.00 /pair		0	\$0	
Packing Tape (doz)	\$72.00 /case		0	\$0	
Padlocks	\$12.00 each		0	\$0	
Sampling Tables	\$40.00 each		1	\$40	
Radiological Badges	\$20.00 each		0	\$0	
Aluminum Foil	\$1.00 /roll		0	\$0	
Stain Stl bwl/spn	\$30.00 /set		1	\$30	
Survey Stake/Flag	\$20.00 /bundle		1	\$20	
Teflon tape	\$8.00 /roll		0	\$0	
Tyveks	\$6.30 each		18	\$113	
Water (HPLC Grade)	\$97.00 /case		2	\$194	
Ziplock bags	\$3.00 /box		1	\$3	
Calibration Gas	\$450.00 /tank		0	\$0	
Ultra Pure Air	\$310.00 /ton		0	\$0	
Teflon Tubing	\$120.00 /roll		0	\$0	
Teflon Sheeting	\$500.00 /roll		0	\$0	
Folding Live Traps	\$15.00 each		0	\$0	
Glassware	\$25.00 each		0	\$0	
Quartz Filters	\$10.00 each		0	\$0	
Vermiculite Packing	\$16.00 /bag		8	\$128	

SUBTOTAL MATLS & SUPPLIES: \$1,639

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.5
Surface Water and
Sediment Sampling
43 Samples @ 4 per day
(10 Days)

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
TRAVEL					
Airfare Boston\Syracuse	\$500.00 /trip		0	\$0	
Airfare Boston\Huntsville	\$900.00 /trip		0	\$0	
Subsistence-Seneca	\$96.00 /day		18	\$1,728	
Subsistence-Huntsville	\$89.00 /day		0	\$0	
Parking,Airport	\$13.00 /day		18	\$234	
Auto Rental	\$55.00 /day		6	\$330	
Suburban\Van rental	\$585.00 /week		1	\$585	
Mileage	\$0.31 /mile		0	\$0	
SUBTOTAL TRAVEL:				\$2,877	

OTHERS

IN-HOUSE SERVICES

Telephone	\$4.00 /call	10	\$40
Word Proc/PC	\$3.70 /hour	0	\$0
CADD	\$5.00 /hour	0	\$0
Facsimile	\$1.00 /page	10	\$10
Overnight Express			
Letter/2 lb pack	\$14.50 each	0	\$0
Package (50 lbs)	\$96.25 each	10	\$963
Mail 4-lb pack	\$4.10 /pack	0	\$0
Mail letters	\$0.54 /letter	0	\$0

Subtotal Services \$1,013

REPRODUCTION

Photocopier	\$0.05 /page	500	\$25
Aerial Photo repro	\$10.00 /photo	0	\$0
Blueline repro	\$1.00 /Sheet	0	\$0
Cronoflex Prod	\$5.50 /Sq Ft	0	\$0
3-ring binders	\$15.00 each	0	\$0
Color Copies	\$2.00 /page	0	\$0

Subtotal Reproduction \$25

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.5
Surface Water and
Sediment Sampling
43 Samples @ 4 per day
(10 Days)

Prop No: 979002-00001

	<u>Unit</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00 /week		0	\$0	
Magnetometer	\$42.00 /week		0	\$0	
pH/Cond meter	\$50.00 /week		1	\$50	
Flow thru pH/Cond meter	\$257.00 /week		0	\$0	
DO meter	\$55.00 /week		1	\$55	
Soil Gas Supplies	\$50.00 /day		0	\$0	
Slug test eqt	\$50.00 /week		0	\$0	
Water level ind	\$40.00 /week		0	\$0	
Turbidimeter	\$30.00 /week		0	\$0	
Data Logger, Trnsdcr	\$135.00 /day		0	\$0	
Flow Meter	\$30.00 /week		1	\$30	
Water coolers	\$40.00 /month		0.25	\$10	
Equipment Trailer	\$1,000.00 /month		0.25	\$250	
Grundfus Redi Flow Pump	\$64.00 /day		0	\$0	
PUF Sampler	\$150.00 /week		0	\$0	
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0	
Hi- Vol Sampler	\$75.00 /week		0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00 /day		0	\$0	
Ponar Sediment Sampler	\$27.00 /day		6	\$162	
3.2 kw Generator	\$50.00 /day		0	\$0	
Seismograph	\$200.00 /day		0	\$0	
EM-31	\$85.00 /day		0	\$0	
GPR	\$500.00 /day		0	\$0	

Subtotal Rental \$557

HEALTH & SAFETY EQUIPMENT

HNu Meter	\$50.00 /day	10	\$500
Alpha Survey Meter	\$80.00 /week	10	\$800
Alpha Scintillation Counter	\$100.00 /week	0	\$0
Beta Sample Counter	\$100.00 /week	0	\$0
Gas Proportional Detector	\$100.00 /week	0	\$0
Gas Prop. Detector-Floor	\$100.00 /week	0	\$0
Radon Monitor	\$300.00 /week	0	\$0
Gamma Radiation Meter	\$50.00 /day	10	\$500
Calib Gas	\$10.00 /day	10	\$100
2-way radios	\$15.00 /ea/wk	2	\$30
Air Purif Resp	\$20.00 /week	0	\$0
10-Gal Eye Wash	\$35.00 /week	1	\$35
Combination SCBA/SAR	\$150.00 /day	0	\$0

Subtotal H & S \$1,965

SUBTOTAL OTHERS: \$3,560

SUBTOTAL LABOR & ODC'S: \$24,237

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.5
Surface Water and
Sediment Sampling
43 Samples @ 4 per day
(10 Days)

Prop No: 979002-00001

	Unit				
	Cost	Units	Quantity	Cost	Notes

SUBCONTRACTORS

GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Iron(Ferrous)	\$30.00 each	0	\$0
Sulfide	\$30.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (EPA 9060)	\$25.00 each	0	\$0
TOX (EPA 9056)	\$50.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
BOD	\$60.00 each	0	\$0
Sulfate(EPA 300)	\$25.00 each	0	\$0
COD	\$50.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Volatiles (EPA 524)	\$195.00 each	0	\$0
Hardness(EPA 130.2)	\$15.00 each	0	\$0
Alkalinity(EPA 310)	\$12.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (L. Kahn)	\$60.00 each	0	\$0
TOX (EPA 9056)	\$70.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

Subtotal Team Laboratory			\$0
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MISC. LABORATORY ANALYSIS

Grain Size Dist	\$120.00 each	0	\$0
TCLP	\$1,500.00 each	0	\$0
Moisture Content	\$15.00 each	0	\$0
Bulk Density	\$35.00 each	0	\$0
Chromium (Level II)	\$30.00 each	0	\$0
Total Suspended Solids	\$20.00 each	0	\$0
Total Dissolved Solids	\$20.00 each	0	\$0
Ammonia	\$25.00 each	0	\$0
Phosphate	\$25.00 each	0	\$0
Cation Exchange Capacity	\$100.00 each	0	\$0

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.5
Surface Water and
Sediment Sampling
43 Samples @ 4 per day
(10 Days)

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
RADIOLOGICAL LABORATORY ANALYSIS					
Water Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross Alpha&Beta	\$45.00	each	0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gamma Spectrometry	\$0.00	each	0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross Alpha&Beta	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subtotal Misc. Laboratory				\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	0	\$0	
Photogrammetry	Lump Sum	each	0	\$0	
IDW Disposal	Lump Sum	each	0	\$0	
Surveyor	Lump Sum	each	0	\$0	
Subtotal Investigation Subcontractors				\$0	
Subtotal Laboratory & Investigation Subcontractors:				\$0	
3% Mark-up:				\$0	
SUBTOTAL SUBCONTRACTORS:				\$0	

TASK TOTAL: \$24,237

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.6
Groundwater Sampling
Install 28 MW @ 1 per day
Samp 37 Wells @ 2 per Day (2 Rnds)
(65 Days)

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
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LABOR COSTS

ENGINEERS AND SCIENTISTS

Professional Level 6, Step 2 (P68)	\$58.74 /hour	0	\$0
Professional Level 6, Step 1 (P62)	\$46.47 /hour	0	\$0
Professional Level 5, Step 4 (P58)	\$44.11 /hour	24	\$1,059
Professional Level 5, Step 3 (P56)	\$37.99 /hour	0	\$0
Professional Level 5, Step 2 (P54)	\$32.91 /hour	40	\$1,316
Professional Level 5, Step 1 (P52)	\$29.39 /hour	0	\$0
Professional Level 4, Step 2 (P48)	\$29.13 /hour	0	\$0
Professional Level 4, Step 1 (P42)	\$25.20 /hour	650	\$16,380
Professional Level 3, Step 1 (P35)	\$24.04 /hour	0	\$0
Professional Level 2, Step 2 (P28)	\$23.09 /hour	0	\$0
Professional Level 2, Step 1 (P22)	\$19.89 /hour	0	\$0
Professional Level 1, Step 2 (P18)	\$18.57 /hour	650	\$12,071
Professional Level 1, Step 1 (P12)	\$14.84 /hour	0	\$0

TECHNICAL AND SUPPORT SPECIALISTS

Technician Level 5 (T55)	\$21.10 /hour	0	\$0
Technician Level 4, Step 2 (T48)	\$16.58 /hour	650	\$10,777
Technician Level 4, Step 1 (T42)	\$14.08 /hour	0	\$0
Technician Level 3, Step 2 (T38)	\$13.99 /hour	0	\$0
Technician Level 3, Step 1 (T32)	\$11.61 /hour	0	\$0
Technician Level 2 (T25)	\$10.13 /hour	0	\$0
Technician Level 1 (T15)	\$8.89 /hour	0	\$0
Support Level 3 (S35)	\$20.61 /hour	0	\$0
Support Level 2 (S25)	\$12.40 /hour	0	\$0
Support Level 1 (S15)	\$8.72 /hour	0	\$0

TOTAL HOURS/LABOR COST

2014	\$41,603
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Contract Year: 1

Base Yr

Overhead Rate: 143%

Labor Burden: \$59,492

SUBTOTAL BURDENED LABOR: \$101,094

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.6
Groundwater Sampling
Install 28 MW @ 1 per day
Samp 37 Wells @ 2 per Day (2 Rnds)
(65 Days)

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00 /roll		1	\$20	
40 mL VOA Vials	\$122.74 /case		2	\$245	
1 Liter Amber Bottles	\$37.95 /case		5	\$190	
32 oz. HDPE Bottles	\$30.75 /case		5	\$154	
Braided Nylon Rope	\$0.15 /foot		0	\$0	
Bubble Pack	\$84.00 /roll		2	\$168	
Decon Eqt	\$18.00 /kit		2	\$36	
55g drums fill/mov	\$100.00 each		0	\$0	
Field Notebook	\$14.00 each		1	\$14	
Ice	\$1.00 /bag		30	\$30	
Latex Gloves	\$10.00 /box		1	\$10	
Methanol (Optima)	\$25.00 /bottle		4	\$100	
Hexane (Optima)	\$25.00 /bottle		0	\$0	
Acetone (Optima)	\$50.00 /bottle		0	\$0	
HCl (Optima)	\$285.00 /bottle		2	\$570	
HNO3 (Optima)	\$175.00 /bottle		2	\$350	
Ascorbic Acid	\$10.00 /bottle		0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00 /box		0	\$0	
Overboots	\$4.00 /pair		195	\$780	
Respirator Cartridges	\$15.00 /pair		0	\$0	
Packing Tape (doz)	\$72.00 /case		0	\$0	
Padlocks	\$12.00 each		0	\$0	
Sampling Tables	\$40.00 each		0	\$0	
Radiological Badges	\$20.00 each		0	\$0	
Aluminum Foil	\$1.00 /roll		0	\$0	
Stain Stl bwl/spn	\$30.00 /set		0	\$0	
Survey Stake/Flag	\$20.00 /bundle		0	\$0	
Teflon tape	\$8.00 /roll		0	\$0	
Tyveks	\$6.30 each		195	\$1,229	
Water (HPLC Grade)	\$97.00 /case		20	\$1,940	
Ziplock bags	\$3.00 /box		2	\$6	
Calibration Gas	\$450.00 /tank		0	\$0	
Ultra Pure Air	\$310.00 /ton		0	\$0	
Teflon Tubing	\$120.00 /roll		0	\$0	
Teflon Sheeting	\$500.00 /roll		0	\$0	
Folding Live Traps	\$15.00 each		0	\$0	
Glassware	\$25.00 each		0	\$0	
Quartz Filters	\$10.00 each		0	\$0	
Vermiculite Packing	\$16.00 /bag		30	\$480	

SUBTOTAL MATLS & SUPPLIES: \$6,321

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.6
Groundwater Sampling
Install 28 MW @ 1 per day
Samp 37 Wells @ 2 per Day (2 Rnds)
(65 Days)

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
TRAVEL					
Airfare Boston\Syracuse	\$500.00 /trip		9	\$4,500	3 Inst.+ 3/Rnd.X2
Airfare Boston\Huntsville	\$900.00 /trip		0	\$0	
Subsistence-Seneca	\$96.00 /day		195	\$18,720	
Subsistence-Huntsville	\$89.00 /day		0	\$0	
Parking,Airport	\$13.00 /day		130	\$1,690	
Auto Rental	\$55.00 /day		65	\$3,575	
Suburban\Van rental	\$585.00 /week		8	\$4,680	
Mileage	\$0.31 /mile		300	\$93	
SUBTOTAL TRAVEL:				\$33,258	

OTHERS

IN-HOUSE SERVICES

Telephone	\$4.00 /call	20	\$80
Word Proc/PC	\$3.70 /hour	0	\$0
CADD	\$5.00 /hour	0	\$0
Facsimile	\$1.00 /page	50	\$50
Overnight Express			
Letter/2 lb pack	\$14.50 each	0	\$0
Package (50 lbs)	\$96.25 each	50	\$4,813
Mail 4-lb pack	\$4.10 /pack	0	\$0
Mail letters	\$0.54 /letter	0	\$0

Subtotal Services \$4,943

REPRODUCTION

Photocopier	\$0.05 /page	500	\$25
Aerial Photo repro	\$10.00 /photo	0	\$0
Blueline repro	\$1.00 /Sheet	0	\$0
Cronoflex Prod	\$5.50 /Sq Ft	0	\$0
3-ring binders	\$15.00 each	0	\$0
Color Copies	\$2.00 /page	0	\$0

Subtotal Reproduction \$25

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.6
Groundwater Sampling
Install 28 MW @ 1 per day
Samp 37 Wells @ 2 per Day (2 Rnds)
(65 Days)

Prop No: 979002-00001

	<u>Unit</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00 /week		16	\$880	
Magnetometer	\$42.00 /week		0	\$0	
pH/Cond meter	\$50.00 /week		4	\$200	
Flow thru pH/Cond meter	\$257.00 /week		4	\$1,028	
DO meter	\$55.00 /week		4	\$220	
Soil Gas Supplies	\$50.00 /day		0	\$0	
Slug test eqt	\$50.00 /week		2	\$100	
Water level ind	\$40.00 /week		8	\$320	
Turbidimeter	\$30.00 /week		4	\$120	
Data Logger, Trnsdcr	\$135.00 /day		2	\$270	
Flow Meter	\$30.00 /week		0	\$0	
Water coolers	\$40.00 /month		2	\$80	
Equipment Trailer	\$1,000.00 /month		2	\$2,000	
Grundfus Redi Flow Pump	\$64.00 /day		37	\$2,368	
PUF Sampler	\$150.00 /week		0	\$0	
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0	
Hi- Vol Sampler	\$75.00 /week		0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00 /day		0	\$0	
Ponar Sediment Sampler	\$27.00 /day		0	\$0	
3.2 kw Generator	\$50.00 /day		37	\$1,850	
Seismograph	\$200.00 /day		0	\$0	
EM-31	\$85.00 /day		0	\$0	
GPR	\$500.00 /day		0	\$0	
Subtotal Rental				\$9,436	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00 /day		65	\$3,250	
Alpha Survey Meter	\$80.00 /week		65	\$5,200	
Alpha Scintillation Counter	\$100.00 /week		0	\$0	
Beta Sample Counter	\$100.00 /week		0	\$0	
Gas Proportional Detector	\$100.00 /week		0	\$0	
Gas Prop. Detector-Floor	\$100.00 /week		0	\$0	
Radon Monitor	\$300.00 /week		0	\$0	
Gamma Radiation Meter	\$50.00 /day		65	\$3,250	
Calib Gas	\$10.00 /day		65	\$650	
2-way radios	\$15.00 /ea/wk		16	\$240	
Air Purif Resp	\$20.00 /week		0	\$0	
10-Gal Eye Wash	\$35.00 /week		8	\$280	
Combination SCBA/SAR	\$150.00 /day		0	\$0	
Subtotal H & S				\$12,870	

SUBTOTAL OTHERS: \$27,274

SUBTOTAL LABOR & ODC'S: \$167,947

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.6
Groundwater Sampling
Install 28 MW @ 1 per day
Samp 37 Wells @ 2 per Day (2 Rnds)
(65 Days)

Prop No: 979002-00001

	Unit				
	Cost	Units	Quantity	Cost	Notes

SUBCONTRACTORS

GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Iron(Ferrous)	\$30.00 each	0	\$0
Sulfide	\$30.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (EPA 9060)	\$25.00 each	0	\$0
TOX (EPA 9056)	\$50.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
BOD	\$60.00 each	0	\$0
Sulfate(EPA 300)	\$25.00 each	0	\$0
COD	\$50.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Volatiles (EPA 524)	\$195.00 each	0	\$0
Hardness(EPA 130.2)	\$15.00 each	0	\$0
Alkalinity(EPA 310)	\$12.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (L. Kahn)	\$60.00 each	0	\$0
TOX (EPA 9056)	\$70.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

Subtotal Team Laboratory			\$0
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MISC. LABORATORY ANALYSIS

Grain Size Dist	\$120.00 each	0	\$0
TCLP	\$1,500.00 each	0	\$0
Moisture Content	\$15.00 each	0	\$0
Bulk Density	\$35.00 each	0	\$0
Chromium (Level II)	\$30.00 each	0	\$0
Total Suspended Solids	\$20.00 each	0	\$0
Total Dissolved Solids	\$20.00 each	0	\$0
Ammonia	\$25.00 each	0	\$0
Phosphate	\$25.00 each	0	\$0
Cation Exchange Capacity	\$100.00 each	0	\$0

Client: U.S. Army Corps of Engineers
Huntsville Division
Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E
Prop No: 979002-00001

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Task # 2.6
Groundwater Sampling
Install 28 MW @ 1 per day
Samp 37 Wells @ 2 per Day (2 Rnds)
(65 Days)

	Unit			
	Cost	Units	Quantity	Cost
				Notes
RADIOLOGICAL LABORATORY ANALYSIS				
Water Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gross Alpha&Beta	\$45.00	each	0	\$0
Soil Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gamma Spectrometry	\$0.00	each	0	\$0
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0
Sample Prep/Return	\$0.00	each	0	\$0
Wipe Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gross Alpha&Beta	\$45.00	each	0	\$0
AIR SAMPLES LABORATORY ANALYSIS				
SVOC's	\$490.00	each	0	\$0
Metals	\$150.00	each	0	\$0
Radon (Alpha Film)	\$25.00	each	0	\$0
Subtotal Misc. Laboratory				\$0
INVESTIGATION SUBCONTRACTORS				
Driller	Lump Sum	each	29799	\$29,799
Photogrammetry	Lump Sum	each	0	\$0
IDW Disposal	Lump Sum	each	4995	\$4,995
Surveyor	Lump Sum	each	0	\$0
Subtotal Investigation Subcontractors				\$34,794
Subtotal Laboratory & Investigation Subcontractors:				\$34,794
3% Mark-up:				\$1,044
SUBTOTAL SUBCONTRACTORS:				\$35,838
=====				
TASK TOTAL:				\$203,785

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.7
Ecological Investigation
Terrestrial Invest. (3 days)
Aquatic Invest. (3 days)
Wildlife Invest. (3days)

Prop No: 979002-00001

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
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LABOR COSTS

ENGINEERS AND SCIENTISTS

Professional Level 6, Step 2 (P68)	\$58.74 /hour	0	\$0
Professional Level 6, Step 1 (P62)	\$46.47 /hour	0	\$0
Professional Level 5, Step 4 (P58)	\$44.11 /hour	8	\$353
Professional Level 5, Step 3 (P56)	\$37.99 /hour	0	\$0
Professional Level 5, Step 2 (P54)	\$32.91 /hour	0	\$0
Professional Level 5, Step 1 (P52)	\$29.39 /hour	0	\$0
Professional Level 4, Step 2 (P48)	\$29.13 /hour	0	\$0
Professional Level 4, Step 1 (P42)	\$25.20 /hour	90	\$2,268
Professional Level 3, Step 1 (P35)	\$24.04 /hour	0	\$0
Professional Level 2, Step 2 (P28)	\$23.09 /hour	90	\$2,078
Professional Level 2, Step 1 (P22)	\$19.89 /hour	0	\$0
Professional Level 1, Step 2 (P18)	\$18.57 /hour	0	\$0
Professional Level 1, Step 1 (P12)	\$14.84 /hour	0	\$0

TECHNICAL AND SUPPORT SPECIALISTS

Technician Level 5 (T55)	\$21.10 /hour	0	\$0
Technician Level 4, Step 2 (T48)	\$16.58 /hour	0	\$0
Technician Level 4, Step 1 (T42)	\$14.08 /hour	0	\$0
Technician Level 3, Step 2 (T38)	\$13.99 /hour	0	\$0
Technician Level 3, Step 1 (T32)	\$11.61 /hour	0	\$0
Technician Level 2 (T25)	\$10.13 /hour	0	\$0
Technician Level 1 (T15)	\$8.89 /hour	0	\$0
Support Level 3 (S35)	\$20.61 /hour	0	\$0
Support Level 2 (S25)	\$12.40 /hour	0	\$0
Support Level 1 (S15)	\$8.72 /hour	0	\$0

TOTAL HOURS/LABOR COST

188 \$4,699

Contract Year: 1

Base Yr

Overhead Rate: 143%

Labor Burden: \$6,720

SUBTOTAL BURDENED LABOR: \$11,419

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.7
Ecological Investigation
Terrestrial Invest. (3 days)
Aquatic Invest. (3 days)
Wildlife Invest. (3days)

Prop No: 979002-00001

	Unit			
	Cost	Units	Quantity	Cost
MATERIALS AND SUPPLIES				
Bottle labels	\$20.00 /roll		0	\$0
40 mL VOA Vials	\$122.74 /case		0	\$0
1 Liter Amber Bottles	\$37.95 /case		0	\$0
32 oz. HDPE Bottles	\$30.75 /case		0	\$0
Braided Nylon Rope	\$0.15 /foot		0	\$0
Bubble Pack	\$84.00 /roll		0	\$0
Decon Eqt	\$18.00 /kit		0	\$0
55g drums fill/mov	\$100.00 each		0	\$0
Field Notebook	\$14.00 each		2	\$28
Ice	\$1.00 /bag		0	\$0
Latex Gloves	\$10.00 /box		0	\$0
Methanol (Optima)	\$25.00 /bottle		0	\$0
Hexane (Optima)	\$25.00 /bottle		0	\$0
Acetone (Optima)	\$50.00 /bottle		0	\$0
HCl (Optima)	\$285.00 /bottle		0	\$0
HNO3 (Optima)	\$175.00 /bottle		0	\$0
Ascorbic Acid	\$10.00 /bottle		0	\$0
Filters (0.45uM & 0.5uM)	\$50.00 /box		0	\$0
Overboots	\$4.00 /pair		36	\$144
Respirator Cartridges	\$15.00 /pair		0	\$0
Packing Tape (doz)	\$72.00 /case		0	\$0
Padlocks	\$12.00 each		0	\$0
Sampling Tables	\$40.00 each		0	\$0
Radiological Badges	\$20.00 each		0	\$0
Aluminum Foil	\$1.00 /roll		0	\$0
Stain Stl bwl/spn	\$30.00 /set		0	\$0
Survey Stake/Flag	\$20.00 /bundle		2	\$40
Teflon tape	\$8.00 /roll		0	\$0
Tyveks	\$6.30 each		36	\$227
Water (HPLC Grade)	\$97.00 /case		1	\$97
Ziplock bags	\$3.00 /box		0	\$0
Calibration Gas	\$450.00 /tank		0	\$0
Ultra Pure Air	\$310.00 /ton		0	\$0
Teflon Tubing	\$120.00 /roll		0	\$0
Teflon Sheeting	\$500.00 /roll		0	\$0
Folding Live Traps	\$15.00 each		10	\$150
Glassware	\$25.00 each		0	\$0
Quartz Filters	\$10.00 each		0	\$0
Vermiculite Packing	\$16.00 /bag		0	\$0
SUBTOTAL MATLS & SUPPLIES:				\$686

Client:	U.S. Army Corps of Engineers Huntsville Division	Printed:	22-Mar-96	Parsons Engineering Science, Inc.
Project:	Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas SEAD-12 Annex E			Task # 2.7 Ecological Investigation Terrestrial Invest. (3 days) Aquatic Invest. (3 days) Wildlife Invest. (3days)
Prop No:	979002-00001			

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
TRAVEL					
Airfare Boston\Syracuse	\$500.00 /trip		2	\$1,000	
Airfare Boston\Huntsville	\$900.00 /trip		0	\$0	
Subsistence-Seneca	\$96.00 /day		18	\$1,728	
Subsistence-Huntsville	\$89.00 /day		0	\$0	
Parking,Airport	\$13.00 /day		18	\$234	
Auto Rental	\$55.00 /day		9	\$495	
Suburban\Van rental	\$585.00 /week		2	\$1,170	
Mileage	\$0.31 /mile		100	\$31	
SUBTOTAL TRAVEL:				\$4,658	

OTHERS

IN-HOUSE SERVICES

Telephone	\$4.00 /call	20	\$80
Word Proc/PC	\$3.70 /hour	0	\$0
CADD	\$5.00 /hour	0	\$0
Facsimile	\$1.00 /page	50	\$50
Overnight Express			
Letter/2 lb pack	\$14.50 each	0	\$0
Package (50 lbs)	\$96.25 each	0	\$0
Mail 4-lb pack	\$4.10 /pack	0	\$0
Mail letters	\$0.54 /letter	0	\$0

Subtotal Services	\$130
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REPRODUCTION

Photocopier	\$0.05 /page	500	\$25
Aerial Photo repro	\$10.00 /photo	10	\$100
Blueline repro	\$1.00 /Sheet	0	\$0
Cronoflex Prod	\$5.50 /Sq Ft	0	\$0
3-ring binders	\$15.00 each	0	\$0
Color Copies	\$2.00 /page	0	\$0

Subtotal Reproduction	\$125
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Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.7
Ecological Investigation
Terrestrial Invest. (3 days)
Aquatic Invest. (3 days)
Wildlife Invest. (3days)

Prop No: 979002-00001

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00 /week		0	\$0	
Magnetometer	\$42.00 /week		0	\$0	
pH/Cond meter	\$50.00 /week		0	\$0	
Flow thru pH/Cond meter	\$257.00 /week		0	\$0	
DO meter	\$55.00 /week		0	\$0	
Soil Gas Supplies	\$50.00 /day		0	\$0	
Slug test eqt	\$50.00 /week		0	\$0	
Water level ind	\$40.00 /week		0	\$0	
Turbidimeter	\$30.00 /week		0	\$0	
Data Logger, Trnsdcr	\$135.00 /day		0	\$0	
Flow Meter	\$30.00 /week		1	\$30	
Water coolers	\$40.00 /month		0.5	\$20	
Equipment Trailer	\$1,000.00 /month		0.5	\$500	
Grundfus Redi Flow Pump	\$64.00 /day		0	\$0	
PUF Sampler	\$150.00 /week		0	\$0	
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0	
Hi- Vol Sampler	\$75.00 /week		0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00 /day		0	\$0	
Ponar Sediment Sampler	\$27.00 /day		5	\$135	
3.2 kw Generator	\$50.00 /day		0	\$0	
Seismograph	\$200.00 /day		0	\$0	
EM-31	\$85.00 /day		0	\$0	
GPR	\$500.00 /day		0	\$0	
Subtotal Rental				\$685	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00 /day		9	\$450	
Alpha Survey Meter	\$80.00 /week		0	\$0	
Alpha Scintillation Counter	\$100.00 /week		0	\$0	
Beta Sample Counter	\$100.00 /week		0	\$0	
Gas Proportional Detector	\$100.00 /week		0	\$0	
Gas Prop. Detector-Floor	\$100.00 /week		0	\$0	
Radon Monitor	\$300.00 /week		0	\$0	
Gamma Radiation Meter	\$50.00 /day		0	\$0	
Calib Gas	\$10.00 /day		9	\$90	
2-way radios	\$15.00 /ea/wk		4	\$60	
Air Purif Resp	\$20.00 /week		0	\$0	
10-Gal Eye Wash	\$35.00 /week		2	\$70	
Combination SCBA/SAR	\$150.00 /day		0	\$0	
Subtotal H & S				\$670	

SUBTOTAL OTHERS: \$1,610

SUBTOTAL LABOR & ODC'S: \$18,372

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.7
Ecological Investigation
Terrestrial Invest. (3 days)
Aquatic Invest. (3 days)
Wildlife Invest. (3days)

Prop No: 979002-00001

Unit				
Cost	Units	Quantity	Cost	Notes

SUBCONTRACTORS

GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Iron(Ferrous)	\$30.00 each	0	\$0
Sulfide	\$30.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (EPA 9060)	\$25.00 each	0	\$0
TOX (EPA 9056)	\$50.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
BOD	\$60.00 each	0	\$0
Sulfate(EPA 300)	\$25.00 each	0	\$0
COD	\$50.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Volatiles (EPA 524)	\$195.00 each	0	\$0
Hardness(EPA 130.2)	\$15.00 each	0	\$0
Alkalinity(EPA 310)	\$12.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (L. Kahn)	\$60.00 each	0	\$0
TOX (EPA 9056)	\$70.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

Subtotal Team Laboratory	\$0
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MISC. LABORATORY ANALYSIS

Grain Size Dist	\$120.00 each	0	\$0
TCLP	\$1,500.00 each	0	\$0
Moisture Content	\$15.00 each	0	\$0
Bulk Density	\$35.00 each	0	\$0
Chromium (Level II)	\$30.00 each	0	\$0
Total Suspended Solids	\$20.00 each	0	\$0
Total Dissolved Solids	\$20.00 each	0	\$0
Ammonia	\$25.00 each	0	\$0
Phosphate	\$25.00 each	0	\$0
Cation Exchange Capacity	\$100.00 each	0	\$0

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.7
Ecological Investigation
Terrestrial Invest. (3 days)
Aquatic Invest. (3 days)
Wildlife Invest. (3days)

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
RADIOLOGICAL LABORATORY ANALYSIS					
Water Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross Alpha&Beta	\$45.00	each	0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gamma Spectrometry	\$0.00	each	0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross Alpha&Beta	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subtotal Misc. Laboratory				\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	0	\$0	
Photogrammetry	Lump Sum	each	0	\$0	
IDW Disposal	Lump Sum	each	0	\$0	
Surveyor	Lump Sum	each	0	\$0	
Subtotal Investigation Subcontractors				\$0	
Subtotal Laboratory & Investigation Subcontractors:				\$0	
3% Mark-up:				\$0	
SUBTOTAL SUBCONTRACTORS:				\$0	
=====					
TASK TOTAL:				\$18,372	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.8
Chemical Analysis
218 Soil, 74 GW, 43 SW&Sed,
378 Data points@3.5hrs/point

Prop No: 979002-00001

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
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LABOR COSTS

ENGINEERS AND SCIENTISTS

Professional Level 6, Step 2 (P68)	\$58.74 /hour	0	\$0
Professional Level 6, Step 1 (P62)	\$46.47 /hour	0	\$0
Professional Level 5, Step 4 (P58)	\$44.11 /hour	16	\$706
Professional Level 5, Step 3 (P56)	\$37.99 /hour	0	\$0
Professional Level 5, Step 2 (P54)	\$32.91 /hour	0	\$0
Professional Level 5, Step 1 (P52)	\$29.39 /hour	0	\$0
Professional Level 4, Step 2 (P48)	\$29.13 /hour	0	\$0
Professional Level 4, Step 1 (P42)	\$25.20 /hour	0	\$0
Professional Level 3, Step 1 (P35)	\$24.04 /hour	0	\$0
Professional Level 2, Step 2 (P28)	\$23.09 /hour	0	\$0
Professional Level 2, Step 1 (P22)	\$19.89 /hour	1323	\$26,314
Professional Level 1, Step 2 (P18)	\$18.57 /hour	0	\$0
Professional Level 1, Step 1 (P12)	\$14.84 /hour	0	\$0

TECHNICAL AND SUPPORT SPECIALISTS

Technician Level 5 (T55)	\$21.10 /hour	0	\$0
Technician Level 4, Step 2 (T48)	\$16.58 /hour	0	\$0
Technician Level 4, Step 1 (T42)	\$14.08 /hour	0	\$0
Technician Level 3, Step 2 (T38)	\$13.99 /hour	0	\$0
Technician Level 3, Step 1 (T32)	\$11.61 /hour	0	\$0
Technician Level 2 (T25)	\$10.13 /hour	0	\$0
Technician Level 1 (T15)	\$8.89 /hour	0	\$0
Support Level 3 (S35)	\$20.61 /hour	0	\$0
Support Level 2 (S25)	\$12.40 /hour	0	\$0
Support Level 1 (S15)	\$8.72 /hour	0	\$0

TOTAL HOURS/LABOR COST	1339	\$27,020
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Contract Year: 1

Base Yr

Overhead Rate: 143%

Labor Burden: \$38,639

SUBTOTAL BURDENED LABOR: \$65,659

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.8
Chemical Analysis
218 Soil, 74 GW, 43 SW&Sed,
378 Data points@3.5hrs/point

Prop No: 979002-00001

	Unit			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
MATERIALS AND SUPPLIES				
Bottle labels	\$20.00	/roll	0	\$0
40 mL VOA Vials	\$122.74	/case	0	\$0
1 Liter Amber Bottles	\$37.95	/case	0	\$0
32 oz. HDPE Bottles	\$30.75	/case	0	\$0
Braided Nylon Rope	\$0.15	/foot	0	\$0
Bubble Pack	\$84.00	/roll	0	\$0
Decon Eqt	\$18.00	/kit	0	\$0
55g drums fill/mov	\$100.00	each	0	\$0
Field Notebook	\$14.00	each	0	\$0
Ice	\$1.00	/bag	0	\$0
Latex Gloves	\$10.00	/box	0	\$0
Methanol (Optima)	\$25.00	/bottle	0	\$0
Hexane (Optima)	\$25.00	/bottle	0	\$0
Acetone (Optima)	\$50.00	/bottle	0	\$0
HCl (Optima)	\$285.00	/bottle	0	\$0
HNO3 (Optima)	\$175.00	/bottle	0	\$0
Ascorbic Acid	\$10.00	/bottle	0	\$0
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0
Overboots	\$4.00	/pair	0	\$0
Respirator Cartridges	\$15.00	/pair	0	\$0
Packing Tape (doz)	\$72.00	/case	0	\$0
Padlocks	\$12.00	each	0	\$0
Sampling Tables	\$40.00	each	0	\$0
Radiological Badges	\$20.00	each	0	\$0
Aluminum Foil	\$1.00	/roll	0	\$0
Stain Stl bwl/spn	\$30.00	/set	0	\$0
Survey Stake/Flag	\$20.00	/bundle	0	\$0
Teflon tape	\$8.00	/roll	0	\$0
Tyveks	\$6.30	each	0	\$0
Water (HPLC Grade)	\$97.00	/case	0	\$0
Ziplock bags	\$3.00	/box	0	\$0
Calibration Gas	\$450.00	/tank	0	\$0
Ultra Pure Air	\$310.00	/ton	0	\$0
Teflon Tubing	\$120.00	/roll	0	\$0
Teflon Sheeting	\$500.00	/roll	0	\$0
Folding Live Traps	\$15.00	each	0	\$0
Glassware	\$25.00	each	0	\$0
Quartz Filters	\$10.00	each	0	\$0
Vermiculite Packing	\$16.00	/bag	0	\$0
SUBTOTAL MATLS & SUPPLIES:				\$0

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.8
Chemical Analysis
218 Soil, 74 GW, 43 SW&Sed,
378 Data points@3.5hrs/point

Prop No: 979002-00001

	Unit			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
<u>Notes</u>				
TRAVEL				
Airfare Boston\Syracuse	\$500.00	/trip	0	\$0
Airfare Boston\Huntsville	\$900.00	/trip	0	\$0
Subsistence-Seneca	\$96.00	/day	0	\$0
Subsistence-Huntsville	\$89.00	/day	0	\$0
Parking,Airport	\$13.00	/day	0	\$0
Auto Rental	\$55.00	/day	0	\$0
Suburban\Van rental	\$585.00	/week	0	\$0
Mileage	\$0.31	/mile	0	\$0
SUBTOTAL TRAVEL:				\$0
OTHERS				
IN-HOUSE SERVICES				
Telephone	\$4.00	/call	0	\$0
Word Proc/PC	\$3.70	/hour	0	\$0
CADD	\$5.00	/hour	0	\$0
Facsimile	\$1.00	/page	0	\$0
Overnight Express				
Letter/2 lb pack	\$14.50	each	0	\$0
Package (50 lbs)	\$96.25	each	0	\$0
Mail 4-lb pack	\$4.10	/pack	0	\$0
Mail letters	\$0.54	/letter	0	\$0
Subtotal Services				\$0
REPRODUCTION				
Photocopier	\$0.05	/page	0	\$0
Aerial Photo repro	\$10.00	/photo	0	\$0
Blueline repro	\$1.00	/Sheet	0	\$0
Cronoflex Prod	\$5.50	/Sq Ft	0	\$0
3-ring binders	\$15.00	each	0	\$0
Color Copies	\$2.00	/page	0	\$0
Subtotal Reproduction				\$0

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.8
Chemical Analysis
218 Soil, 74 GW, 43 SW&Sed,
378 Data points@3.5hrs/point

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00 /week		0	\$0	
Magnetometer	\$42.00 /week		0	\$0	
pH/Cond meter	\$50.00 /week		0	\$0	
Flow thru pH/Cond meter	\$257.00 /week		0	\$0	
DO meter	\$55.00 /week		0	\$0	
Soil Gas Supplies	\$50.00 /day		0	\$0	
Slug test eqt	\$50.00 /week		0	\$0	
Water level ind	\$40.00 /week		0	\$0	
Turbidimeter	\$30.00 /week		0	\$0	
Data Logger,Trnsdcr	\$135.00 /day		0	\$0	
Flow Meter	\$30.00 /week		0	\$0	
Water coolers	\$40.00 /month		0	\$0	
Equipment Trailer	\$1,000.00 /month		0	\$0	
Grundfus Redi Flow Pump	\$64.00 /day		0	\$0	
PUF Sampler	\$150.00 /week		0	\$0	
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0	
Hi- Vol Sampler	\$75.00 /week		0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00 /day		0	\$0	
Ponar Sediment Sampler	\$27.00 /day		0	\$0	
3.2 kw Generator	\$50.00 /day		0	\$0	
Seismograph	\$200.00 /day		0	\$0	
EM-31	\$85.00 /day		0	\$0	
GPR	\$500.00 /day		0	\$0	

Subtotal Rental \$0

HEALTH & SAFETY EQUIPMENT

HNu Meter	\$50.00 /day	0	\$0
Alpha Survey Meter	\$80.00 /week	0	\$0
Alpha Scintillation Counter	\$100.00 /week	0	\$0
Beta Sample Counter	\$100.00 /week	0	\$0
Gas Proportional Detector	\$100.00 /week	0	\$0
Gas Prop. Detector-Floor	\$100.00 /week	0	\$0
Radon Monitor	\$300.00 /week	0	\$0
Gamma Radiation Meter	\$50.00 /day	0	\$0
Calib Gas	\$10.00 /day	0	\$0
2-way radios	\$15.00 /ea/wk	0	\$0
Air Purif Resp	\$20.00 /week	0	\$0
10-Gal Eye Wash	\$35.00 /week	0	\$0
Combination SCBA/SAR	\$150.00 /day	0	\$0

Subtotal H & S \$0

SUBTOTAL OTHERS: \$0

SUBTOTAL LABOR & ODC'S: \$65,659

Client: U.S. Army Corps of Engineers
Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Prop No: 979002-00001

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Task # 2.8
Chemical Analysis
218 Soil, 74 GW, 43 SW&Sed,
378 Data points@3.5hrs/point

	Unit				
	Cost	Units	Quantity	Cost	Notes

SUBCONTRACTORS

GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0	
B/N/A (TCL)	\$400.00 each	160	\$64,000	117+14M+22R+7D
Pest./PCBs (TCL)	\$180.00 each	160	\$28,800	117+14M+22R+7D
Total Metals & CN(TAL)	\$170.00 each	160	\$27,200	117+14M+22R+7D
Iron(Ferrous)	\$30.00 each	74	\$2,220	74GW(37x2Rnds.)
Sulfide	\$30.00 each	74	\$2,220	74GW(37x2Rnds.)
Spec Cond(EPA 9050)	\$8.00 each	0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00 each	117	\$2,925	74GW+43SW
TOX (EPA 9056)	\$50.00 each	0	\$0	
Chloride(EPA 9250)	\$25.00 each	0	\$0	
BOD	\$60.00 each	74	\$4,440	74GW(37x2Rnds.)
Sulfate(EPA 300)	\$25.00 each	74	\$1,850	74GW(37x2Rnds.)
COD	\$50.00 each	74	\$3,700	74GW(37x2Rnds.)
pH (EPA 9045)	\$8.00 each	0	\$0	
Volatiles(EPA524or8260)	\$195.00 each	226	\$44,070	117+14M+66B+22R+7
Hardness(EPA 130.2)	\$15.00 each	117	\$1,755	74GW+43SW
Alkalinity(EPA 310)	\$12.00 each	117	\$1,404	74GW+43SW
Nitrate (EPA 353.2)	\$20.00 each	117	\$2,340	74GW+43SW

SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	306	\$55,080	158+43+60T+30M+15
B/N/A (TCL)	\$400.00 each	306	\$122,400	158+43+60T+30M+15
Pest./PCBs (TCL)	\$180.00 each	306	\$55,080	158+43+60T+30M+15
Total Metals & CN(TAL)	\$170.00 each	306	\$52,020	158+43+60T+30M+15
Spec Cond(EPA 9050)	\$8.00 each	0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00 each	55	\$3,300	6SB+6TP+43SD
TOX (EPA 9056)	\$70.00 each	0	\$0	
Chloride(EPA 9250)	\$25.00 each	0	\$0	
pH (EPA 9045)	\$8.00 each	55	\$440	6SB+6TP+43SD
Nitrate (EPA 353.2)	\$20.00 each	306	\$6,120	158+43+60T+30M+15

Subtotal Team Laboratory

\$481,364

MISC. LABORATORY ANALYSIS

Grain Size Dist	\$120.00 each	55	\$6,600	6SB+6TP+43SD
TCLP	\$1,500.00 each	12	\$18,000	6SB+6TP
Moisture Content	\$15.00 each	0	\$0	
Bulk Density	\$35.00 each	15	\$525	6SB+6TP+3SD
Chromium (Level II)	\$30.00 each	0	\$0	
Total Suspended Solids	\$20.00 each	43	\$860	43SW
Total Dissolved Solids	\$20.00 each	117	\$2,340	74GW+43SW
Ammonia	\$25.00 each	43	\$1,075	43SW
Phosphate	\$25.00 each	43	\$1,075	43SW
Cation Exchange Capacity	\$100.00 each	55	\$5,500	6SB+6TP+43SD

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.8
Chemical Analysis
218 Soil, 74 GW, 43 SW&Sed,
378 Data points@3.5hrs/point

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
RADIOLOGICAL LABORATORY ANALYSIS					
Water Samples For:					
Thorium 232, 230, 227	\$60.00	each	157	\$9,420	74+43+12M+22R+6D
Uranium 238, 235, 233+234	\$60.00	each	157	\$9,420	74+43+12M+22R+6D
Radium 226,223	\$40.00	each	157	\$6,280	74+43+12M+22R+6D
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	157	\$12,560	74+43+12M+22R+6D
Plutonium 239 + 240	\$65.00	each	157	\$10,205	74+43+12M+22R+6D
Americium 241	\$65.00	each	157	\$10,205	74+43+12M+22R+6D
Gross Alpha&Beta	\$45.00	each	157	\$7,065	74+43+12M+22R+6D
Soil Samples For:					
Thorium 232, 230, 227	\$60.00	each	399	\$23,940	302S+43SD+38M+16
Uranium 238, 235, 233+234	\$60.00	each	399	\$23,940	302S+43SD+38M+16
Radium 226,223	\$40.00	each	399	\$15,960	302S+43SD+38M+16
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	399	\$0	
Plutonium 239 + 240	\$65.00	each	399	\$25,935	302S+43SD+38M+16
Americium 241	\$65.00	each	399	\$25,935	302S+43SD+38M+16
Gamma Spectrometry	\$0.00	each	0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	8	\$6,000	
Sample Prep/Return	\$0.00	each	399	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00	each	134	\$8,040	98W+12S+12M+6B+6
Uranium 238, 235, 233+234	\$60.00	each	134	\$8,040	98W+12S+12M+6B+6
Radium 226,223	\$40.00	each	134	\$5,360	98W+12S+12M+6B+6
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	134	\$10,720	98W+12S+12M+6B+6
Plutonium 239 + 240	\$65.00	each	134	\$8,710	98W+12S+12M+6B+6
Americium 241	\$65.00	each	134	\$8,710	98W+12S+12M+6B+6
Gross Alpha&Beta	\$45.00	each	134	\$6,030	98W+12S+12M+6B+6
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	100	\$2,500	
Subtotal Misc. Laboratory				\$280,950	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	0	\$0	
Photogrammetry	Lump Sum	each	0	\$0	
IDW Disposal	Lump Sum	each	0	\$0	
Surveyor	Lump Sum	each	0	\$0	
Subtotal Investigation Subcontractors				\$0	
Subtotal Laboratory & Investigation Subcontractors:				\$762,314	
3% Mark-up:				\$22,869	
SUBTOTAL SUBCONTRACTORS:				\$785,183	
				=====	
TASK TOTAL:				\$850,843	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.9
Surveying
(318 Sampling Points)
(600 Archeological Points)

Prop No: 979002-00001

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74 /hour		0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47 /hour		0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11 /hour		4	\$176	
Professional Level 5, Step 3 (P56)	\$37.99 /hour		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91 /hour		0	\$0	
Professional Level 5, Step 1 (P52)	\$29.39 /hour		0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13 /hour		0	\$0	
Professional Level 4, Step 1 (P42)	\$25.20 /hour		40	\$1,008	
Professional Level 3, Step 1 (P35)	\$24.04 /hour		0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09 /hour		0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89 /hour		0	\$0	
Professional Level 1, Step 2 (P18)	\$18.57 /hour		0	\$0	
Professional Level 1, Step 1 (P12)	\$14.84 /hour		0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10 /hour		0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58 /hour		0	\$0	
Technician Level 4, Step 1 (T42)	\$14.08 /hour		0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99 /hour		0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61 /hour		0	\$0	
Technician Level 2 (T25)	\$10.13 /hour		0	\$0	
Technician Level 1 (T15)	\$8.89 /hour		0	\$0	
Support Level 3 (S35)	\$20.61 /hour		0	\$0	
Support Level 2 (S25)	\$12.40 /hour		0	\$0	
Support Level 1 (S15)	\$8.72 /hour		0	\$0	
TOTAL HOURS/LABOR COST			44	\$1,184	
Contract Year:	1				
Base Yr					
Overhead Rate:	143%				
Labor Burden:				\$1,694	
SUBTOTAL BURDENED LABOR:				\$2,878	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.9
Surveying
(318 Sampling Points)
(600 Archeological Points)

Prop No: 979002-00001

	<u>Unit</u>		<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
	<u>Cost</u>	<u>Units</u>			
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00	/roll	0	\$0	
40 mL VOA Vials	\$122.74	/case	0	\$0	
1 Liter Amber Bottles	\$37.95	/case	0	\$0	
32 oz. HDPE Bottles	\$30.75	/case	0	\$0	
Braided Nylon Rope	\$0.15	/foot	0	\$0	
Bubble Pack	\$84.00	/roll	0	\$0	
Decon Eq	\$18.00	/kit	0	\$0	
55g drums fill/mov	\$100.00	each	0	\$0	
Field Notebook	\$14.00	each	0	\$0	
Ice	\$1.00	/bag	0	\$0	
Latex Gloves	\$10.00	/box	0	\$0	
Methanol (Optima)	\$25.00	/bottle	0	\$0	
Hexane (Optima)	\$25.00	/bottle	0	\$0	
Acetone (Optima)	\$50.00	/bottle	0	\$0	
HCl (Optima)	\$285.00	/bottle	0	\$0	
HNO3 (Optima)	\$175.00	/bottle	0	\$0	
Ascorbic Acid	\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0	
Overboots	\$4.00	/pair	0	\$0	
Respirator Cartridges	\$15.00	/pair	0	\$0	
Packing Tape (doz)	\$72.00	/case	0	\$0	
Padlocks	\$12.00	each	0	\$0	
Sampling Tables	\$40.00	each	0	\$0	
Radiological Badges	\$20.00	each	0	\$0	
Aluminum Foil	\$1.00	/roll	0	\$0	
Stain Stl bwl/spn	\$30.00	/set	0	\$0	
Survey Stake/Flag	\$20.00	/bundle	0	\$0	
Teflon tape	\$8.00	/roll	0	\$0	
Tyveks	\$6.30	each	0	\$0	
Water (HPLC Grade)	\$97.00	/case	0	\$0	
Ziplock bags	\$3.00	/box	0	\$0	
Calibration Gas	\$450.00	/tank	0	\$0	
Ultra Pure Air	\$310.00	/ton	0	\$0	
Teflon Tubing	\$120.00	/roll	0	\$0	
Teflon Sheeting	\$500.00	/roll	0	\$0	
Folding Live Traps	\$15.00	each	0	\$0	
Glassware	\$25.00	each	0	\$0	
Quartz Filters	\$10.00	each	0	\$0	
Vermiculite Packing	\$16.00	/bag	0	\$0	
SUBTOTAL MATLS & SUPPLIES:				\$0	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.9
Surveying
(318 Sampling Points)
(600 Archeological Points)

Prop No: 979002-00001

	Unit			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
<u>Notes</u>				
TRAVEL				
Airfare Boston\Syracuse	\$500.00	/trip	0	\$0
Airfare Boston\Huntsville	\$900.00	/trip	0	\$0
Subsistence-Seneca	\$96.00	/day	0	\$0
Subsistence-Huntsville	\$89.00	/day	0	\$0
Parking,Airport	\$13.00	/day	0	\$0
Auto Rental	\$55.00	/day	0	\$0
Suburban\Van rental	\$585.00	/week	0	\$0
Mileage	\$0.31	/mile	0	\$0
SUBTOTAL TRAVEL:				\$0
OTHERS				
IN-HOUSE SERVICES				
Telephone	\$4.00	/call	10	\$40
Word Proc/PC	\$3.70	/hour	0	\$0
CADD	\$5.00	/hour	0	\$0
Facsimile	\$1.00	/page	10	\$10
Overnight Express				
Letter/2 lb pack	\$14.50	each	0	\$0
Package (50 lbs)	\$96.25	each	0	\$0
Mail 4-lb pack	\$4.10	/pack	0	\$0
Mail letters	\$0.54	/letter	0	\$0
Subtotal Services				\$50
REPRODUCTION				
Photocopier	\$0.05	/page	0	\$0
Aerial Photo repro	\$10.00	/photo	0	\$0
Blueline repro	\$1.00	/Sheet	0	\$0
Cronoflex Prod	\$5.50	/Sq Ft	0	\$0
3-ring binders	\$15.00	each	0	\$0
Color Copies	\$2.00	/page	0	\$0
Subtotal Reproduction				\$0

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.9
Surveying
(318 Sampling Points)
(600 Archeological Points)

Prop No: 979002-00001

	Unit			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
EQUIPMENT RENTAL				
EARTH SCIENCES EQUIPMENT				
Bailer	\$55.00 /week		0	\$0
Magnetometer	\$42.00 /week		0	\$0
pH/Cond meter	\$50.00 /week		0	\$0
Flow thru pH/Cond meter	\$257.00 /week		0	\$0
DO meter	\$55.00 /week		0	\$0
Soil Gas Supplies	\$50.00 /day		0	\$0
Slug test eqt	\$50.00 /week		0	\$0
Water level ind	\$40.00 /week		0	\$0
Turbidimeter	\$30.00 /week		0	\$0
Data Logger, Trnsdcr	\$135.00 /day		0	\$0
Flow Meter	\$30.00 /week		0	\$0
Water coolers	\$40.00 /month		0	\$0
Equipment Trailer	\$1,000.00 /month		0	\$0
Grundfus Redi Flow Pump	\$64.00 /day		0	\$0
PUF Sampler	\$150.00 /week		0	\$0
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0
Hi- Vol Sampler	\$75.00 /week		0	\$0
Hi- Vol Sampler Calibration Kit	\$25.00 /day		0	\$0
Ponar Sediment Sampler	\$27.00 /day		0	\$0
3.2 kw Generator	\$50.00 /day		0	\$0
Seismograph	\$200.00 /day		0	\$0
EM-31	\$85.00 /day		0	\$0
GPR	\$500.00 /day		0	\$0

Subtotal Rental \$0

HEALTH & SAFETY EQUIPMENT

HNu Meter	\$50.00 /day	0	\$0
Alpha Survey Meter	\$80.00 /week	0	\$0
Alpha Scintillation Counter	\$100.00 /week	0	\$0
Beta Sample Counter	\$100.00 /week	0	\$0
Gas Proportional Detector	\$100.00 /week	0	\$0
Gas Prop. Detector-Floor	\$100.00 /week	0	\$0
Radon Monitor	\$300.00 /week	0	\$0
Gamma Radiation Meter	\$50.00 /day	0	\$0
Calib Gas	\$10.00 /day	0	\$0
2-way radios	\$15.00 /ea/wk	0	\$0
Air Purif Resp	\$20.00 /week	0	\$0
10-Gal Eye Wash	\$35.00 /week	0	\$0
Combination SCBA/SAR	\$150.00 /day	0	\$0

Subtotal H & S \$0

SUBTOTAL OTHERS: \$50

SUBTOTAL LABOR & ODC'S: \$2,928

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.9
Surveying
(318 Sampling Points)
(600 Archeological Points)

Prop No: 979002-00001

Unit				
Cost	Units	Quantity	Cost	Notes

SUBCONTRACTORS

GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Iron(Ferrous)	\$30.00 each	0	\$0
Sulfide	\$30.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (EPA 9060)	\$25.00 each	0	\$0
TOX (EPA 9056)	\$50.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
BOD	\$60.00 each	0	\$0
Sulfate(EPA 300)	\$25.00 each	0	\$0
COD	\$50.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Volatiles (EPA 524)	\$195.00 each	0	\$0
Hardness(EPA 130.2)	\$15.00 each	0	\$0
Alkalinity(EPA 310)	\$12.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (L. Kahn)	\$60.00 each	0	\$0
TOX (EPA 9056)	\$70.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

Subtotal Team Laboratory	\$0
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MISC. LABORATORY ANALYSIS

Grain Size Dist	\$120.00 each	0	\$0
TCLP	\$1,500.00 each	0	\$0
Moisture Content	\$15.00 each	0	\$0
Bulk Density	\$35.00 each	0	\$0
Chromium (Level II)	\$30.00 each	0	\$0
Total Suspended Solids	\$20.00 each	0	\$0
Total Dissolved Solids	\$20.00 each	0	\$0
Ammonia	\$25.00 each	0	\$0
Phosphate	\$25.00 each	0	\$0
Cation Exchange Capacity	\$100.00 each	0	\$0

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 2.9
Surveying
(318 Sampling Points)
(600 Archeological Points)

Prop No: 979002-00001

	<u>Unit</u>	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
RADIOLOGICAL LABORATORY ANALYSIS						
Water Samples For:						
Thorium 232, 230, 227	\$60.00 each			0	\$0	
Uranium 238, 235, 233+234	\$60.00 each			0	\$0	
Radium 226,223	\$40.00 each			0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00 each			0	\$0	
Plutonium 239 + 240	\$65.00 each			0	\$0	
Americium 241	\$65.00 each			0	\$0	
Gross Alpha&Beta	\$45.00 each			0	\$0	
Soil Samples For:						
Thorium 232, 230, 227	\$60.00 each			0	\$0	
Uranium 238, 235, 233+234	\$60.00 each			0	\$0	
Radium 226,223	\$40.00 each			0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00 each			0	\$0	
Plutonium 239 + 240	\$65.00 each			0	\$0	
Americium 241	\$65.00 each			0	\$0	
Gamma Spectrometry	\$0.00 each			0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00 each			0	\$0	
Sample Prep/Return	\$0.00 each			0	\$0	
Wipe Samples For:						
Thorium 232, 230, 227	\$60.00 each			0	\$0	
Uranium 238, 235, 233+234	\$60.00 each			0	\$0	
Radium 226,223	\$40.00 each			0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00 each			0	\$0	
Plutonium 239 + 240	\$65.00 each			0	\$0	
Americium 241	\$65.00 each			0	\$0	
Gross Alpha&Beta	\$45.00 each			0	\$0	
AIR SAMPLES LABORATORY ANALYSIS						
SVOC's	\$490.00 each			0	\$0	
Metals	\$150.00 each			0	\$0	
Radon (Alpha Film)	\$25.00 each			0	\$0	
Subtotal Misc. Laboratory					\$0	
INVESTIGATION SUBCONTRACTORS						
Driller	Lump Sum each			0	\$0	
Photogrammetry	Lump Sum each			31600	\$31,600	
IDW Disposal	Lump Sum each			0	\$0	
Surveyor	Lump Sum each			32758	\$32,758	
Subtotal Investigation Subcontractors					\$64,358	
Subtotal Laboratory & Investigation Subcontractors:					\$64,358	
3% Mark-up:					\$1,931	
SUBTOTAL SUBCONTRACTORS:					\$66,289	
					=====	
TASK TOTAL:					\$69,217	

Client: U.S. Army Corps of Engineers Huntsville Division	Printed: 22-Mar-96	Parsons Engineering Science, Inc.
Project: Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas SEAD-12 Annex E		Task # 3 Monthly Field Activity Reports 6 Reports
Prop No: 979002-00001		

	Unit Cost	Units	Quantity	Cost	Notes
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LABOR COSTS

ENGINEERS AND SCIENTISTS

Professional Level 6, Step 2 (P68)	\$58.74 /hour	0	\$0
Professional Level 6, Step 1 (P62)	\$46.47 /hour	0	\$0
Professional Level 5, Step 4 (P58)	\$44.11 /hour	60	\$2,647
Professional Level 5, Step 3 (P56)	\$37.99 /hour	0	\$0
Professional Level 5, Step 2 (P54)	\$32.91 /hour	60	\$1,975
Professional Level 5, Step 1 (P52)	\$29.39 /hour	0	\$0
Professional Level 4, Step 2 (P48)	\$29.13 /hour	0	\$0
Professional Level 4, Step 1 (P42)	\$25.20 /hour	0	\$0
Professional Level 3, Step 1 (P35)	\$24.04 /hour	0	\$0
Professional Level 2, Step 2 (P28)	\$23.09 /hour	0	\$0
Professional Level 2, Step 1 (P22)	\$19.89 /hour	0	\$0
Professional Level 1, Step 2 (P18)	\$18.57 /hour	0	\$0
Professional Level 1, Step 1 (P12)	\$14.84 /hour	0	\$0

TECHNICAL AND SUPPORT SPECIALISTS

Technician Level 5 (T55)	\$21.10 /hour	0	\$0
Technician Level 4, Step 2 (T48)	\$16.58 /hour	0	\$0
Technician Level 4, Step 1 (T42)	\$14.08 /hour	0	\$0
Technician Level 3, Step 2 (T38)	\$13.99 /hour	0	\$0
Technician Level 3, Step 1 (T32)	\$11.61 /hour	0	\$0
Technician Level 2 (T25)	\$10.13 /hour	0	\$0
Technician Level 1 (T15)	\$8.89 /hour	0	\$0
Support Level 3 (S35)	\$20.61 /hour	0	\$0
Support Level 2 (S25)	\$12.40 /hour	30	\$372
Support Level 1 (S15)	\$8.72 /hour	0	\$0

TOTAL HOURS/LABOR COST	150	\$4,993
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Contract Year: 1

Base Yr

Overhead Rate: 143%

Labor Burden: \$7,140

SUBTOTAL BURDENED LABOR: \$12,133

Client: U.S. Army Corps of Engineers

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

Task # 3

RI/FS at the Radiological Disposal Areas

Monthly Field Activity Reports

SEAD-12

6 Reports

Annex E

Prop No: 979002-00001

	Unit			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
MATERIALS AND SUPPLIES				
Bottle labels	\$20.00 /roll		0	\$0
40 mL VOA Vials	\$122.74 /case		0	\$0
1 Liter Amber Bottles	\$37.95 /case		0	\$0
32 oz. HDPE Bottles	\$30.75 /case		0	\$0
Braided Nylon Rope	\$0.15 /foot		0	\$0
Bubble Pack	\$84.00 /roll		0	\$0
Decon Eqt	\$18.00 /kit		0	\$0
55g drums fill/mov	\$100.00 each		0	\$0
Field Notebook	\$14.00 each		0	\$0
Ice	\$1.00 /bag		0	\$0
Latex Gloves	\$10.00 /box		0	\$0
Methanol (Optima)	\$25.00 /bottle		0	\$0
Hexane (Optima)	\$25.00 /bottle		0	\$0
Acetone (Optima)	\$50.00 /bottle		0	\$0
HCl (Optima)	\$285.00 /bottle		0	\$0
HNO3 (Optima)	\$175.00 /bottle		0	\$0
Ascorbic Acid	\$10.00 /bottle		0	\$0
Filters (0.45uM & 0.5uM)	\$50.00 /box		0	\$0
Overboots	\$4.00 /pair		0	\$0
Respirator Cartridges	\$15.00 /pair		0	\$0
Packing Tape (doz)	\$72.00 /case		0	\$0
Padlocks	\$12.00 each		0	\$0
Sampling Tables	\$40.00 each		0	\$0
Radiological Badges	\$20.00 each		0	\$0
Aluminum Foil	\$1.00 /roll		0	\$0
Stain Stl bwl/spn	\$30.00 /set		0	\$0
Survey Stake/Flag	\$20.00 /bundle		0	\$0
Teflon tape	\$8.00 /roll		0	\$0
Tyveks	\$6.30 each		0	\$0
Water (HPLC Grade)	\$97.00 /case		0	\$0
Ziplock bags	\$3.00 /box		0	\$0
Calibration Gas	\$450.00 /tank		0	\$0
Ultra Pure Air	\$310.00 /ton		0	\$0
Teflon Tubing	\$120.00 /roll		0	\$0
Teflon Sheeting	\$500.00 /roll		0	\$0
Folding Live Traps	\$15.00 each		0	\$0
Glassware	\$25.00 each		0	\$0
Quartz Filters	\$10.00 each		0	\$0
Vermiculite Packing	\$16.00 /bag		0	\$0
SUBTOTAL MATLS & SUPPLIES:				\$0

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 3
Monthly Field Activity Reports
6 Reports

Prop No: 979002-00001

	<u>Unit</u>	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
MATERIALS AND SUPPLIES						
Bottle labels		\$20.00	/roll	0	\$0	
40 mL VOA Vials		\$122.74	/case	0	\$0	
1 Liter Amber Bottles		\$37.95	/case	0	\$0	
32 oz. HDPE Bottles		\$30.75	/case	0	\$0	
Braided Nylon Rope		\$0.15	/foot	0	\$0	
Bubble Pack		\$84.00	/roll	0	\$0	
Decon Eq		\$18.00	/kit	0	\$0	
55g drums fill/mov		\$100.00	each	0	\$0	
Field Notebook		\$14.00	each	0	\$0	
Ice		\$1.00	/bag	0	\$0	
Latex Gloves		\$10.00	/box	0	\$0	
Methanol (Optima)		\$25.00	/bottle	0	\$0	
Hexane (Optima)		\$25.00	/bottle	0	\$0	
Acetone (Optima)		\$50.00	/bottle	0	\$0	
HCl (Optima)		\$285.00	/bottle	0	\$0	
HNO3 (Optima)		\$175.00	/bottle	0	\$0	
Ascorbic Acid		\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)		\$50.00	/box	0	\$0	
Overboots		\$4.00	/pair	0	\$0	
Respirator Cartridges		\$15.00	/pair	0	\$0	
Packing Tape (doz)		\$72.00	/case	0	\$0	
Padlocks		\$12.00	each	0	\$0	
Sampling Tables		\$40.00	each	0	\$0	
Radiological Badges		\$20.00	each	0	\$0	
Aluminum Foil		\$1.00	/roll	0	\$0	
Stain Stl bwl/spn		\$30.00	/set	0	\$0	
Survey Stake/Flag		\$20.00	/bundle	0	\$0	
Teflon tape		\$8.00	/roll	0	\$0	
Tyveks		\$6.30	each	0	\$0	
Water (HPLC Grade)		\$97.00	/case	0	\$0	
Ziplock bags		\$3.00	/box	0	\$0	
Calibration Gas		\$450.00	/tank	0	\$0	
Ultra Pure Air		\$310.00	/ton	0	\$0	
Teflon Tubing		\$120.00	/roll	0	\$0	
Teflon Sheeting		\$500.00	/roll	0	\$0	
Folding Live Traps		\$15.00	each	0	\$0	
Glassware		\$25.00	each	0	\$0	
Quartz Filters		\$10.00	each	0	\$0	
Vermiculite Packing		\$16.00	/bag	0	\$0	
SUBTOTAL MATLS & SUPPLIES:					\$0	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 3
Monthly Field Activity Reports
6 Reports

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
TRAVEL					
Airfare Boston\Syracuse	\$500.00 /trip		0	\$0	
Airfare Boston\Huntsville	\$900.00 /trip		0	\$0	
Subsistence-Seneca	\$96.00 /day		0	\$0	
Subsistence-Huntsville	\$89.00 /day		0	\$0	
Parking,Airport	\$13.00 /day		0	\$0	
Auto Rental	\$55.00 /day		0	\$0	
Suburban\Van rental	\$585.00 /week		0	\$0	
Mileage	\$0.31 /mile		0	\$0	
SUBTOTAL TRAVEL:				\$0	
OTHERS					
IN-HOUSE SERVICES					
Telephone	\$4.00 /call		20	\$80	
Word Proc/PC	\$3.70 /hour		20	\$74	
CADD	\$5.00 /hour		0	\$0	
Facsimile	\$1.00 /page		50	\$50	
Overnight Express					
Letter/2 lb pack	\$14.50 each		28	\$406	
Package (50 lbs)	\$96.25 each		0	\$0	
Mail 4-lb pack	\$4.10 /pack		0	\$0	
Mail letters	\$0.54 /letter		0	\$0	
Subtotal Services				\$610	
REPRODUCTION					
Photocopier	\$0.05 /page		1500	\$75	
Aerial Photo repro	\$10.00 /photo		0	\$0	
Blueline repro	\$1.00 /Sheet		0	\$0	
Cronoflex Prod	\$5.50 /Sq Ft		0	\$0	
3-ring binders	\$15.00 each		0	\$0	
Color Copies	\$2.00 /page		0	\$0	
Subtotal Reproduction				\$75	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 3
Monthly Field Activity Reports
6 Reports

Prop No: 979002-00001

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00 /week		0	\$0	
Magnetometer	\$42.00 /week		0	\$0	
pH/Cond meter	\$50.00 /week		0	\$0	
Flow thru pH/Cond meter	\$257.00 /week		0	\$0	
DO meter	\$55.00 /week		0	\$0	
Soil Gas Supplies	\$50.00 /day		0	\$0	
Slug test eqt	\$50.00 /week		0	\$0	
Water level ind	\$40.00 /week		0	\$0	
Turbidimeter	\$30.00 /week		0	\$0	
Data Logger, Trnsdcr	\$135.00 /day		0	\$0	
Flow Meter	\$30.00 /week		0	\$0	
Water coolers	\$40.00 /month		0	\$0	
Equipment Trailer	\$1,000.00 /month		0	\$0	
Grundfus Redi Flow Pump	\$64.00 /day		0	\$0	
PUF Sampler	\$150.00 /week		0	\$0	
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0	
Hi- Vol Sampler	\$75.00 /week		0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00 /day		0	\$0	
Ponar Sediment Sampler	\$27.00 /day		0	\$0	
3.2 kw Generator	\$50.00 /day		0	\$0	
Seismograph	\$200.00 /day		0	\$0	
EM-31	\$85.00 /day		0	\$0	
GPR	\$500.00 /day		0	\$0	
Subtotal Rental				\$0	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00 /day		0	\$0	
Alpha Survey Meter	\$80.00 /week		0	\$0	
Alpha Scintillation Counter	\$100.00 /week		0	\$0	
Beta Sample Counter	\$100.00 /week		0	\$0	
Gas Proportional Detector	\$100.00 /week		0	\$0	
Gas Prop. Detector-Floor	\$100.00 /week		0	\$0	
Radon Monitor	\$300.00 /week		0	\$0	
Gamma Radiation Meter	\$50.00 /day		0	\$0	
Calib Gas	\$10.00 /day		0	\$0	
2-way radios	\$15.00 /ea/wk		0	\$0	
Air Purif Resp	\$20.00 /week		0	\$0	
10-Gal Eye Wash	\$35.00 /week		0	\$0	
Combination SCBA/SAR	\$150.00 /day		0	\$0	
Subtotal H & S				\$0	
SUBTOTAL OTHERS:				\$685	
SUBTOTAL LABOR & ODC'S:				\$12,818	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 3
Monthly Field Activity Reports
6 Reports

Prop No: 979002-00001

	<u>Unit</u>			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
<u>Notes</u>				
SUBCONTRACTORS				
GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS				
Volatiles (TCL)	\$180.00 each		0	\$0
B/N/A (TCL)	\$400.00 each		0	\$0
Pest./PCBs (TCL)	\$180.00 each		0	\$0
Total Metals & CN(TAL)	\$170.00 each		0	\$0
Iron(Ferrous)	\$30.00 each		0	\$0
Sulfide	\$30.00 each		0	\$0
Spec Cond(EPA 9050)	\$8.00 each		0	\$0
Total Organic Carbon (EPA 9060)	\$25.00 each		0	\$0
TOX (EPA 9056)	\$50.00 each		0	\$0
Chloride(EPA 9250)	\$25.00 each		0	\$0
BOD	\$60.00 each		0	\$0
Sulfate(EPA 300)	\$25.00 each		0	\$0
COD	\$50.00 each		0	\$0
pH (EPA 9045)	\$8.00 each		0	\$0
Volatiles (EPA 524)	\$195.00 each		0	\$0
Hardness(EPA 130.2)	\$15.00 each		0	\$0
Alkalinity(EPA 310)	\$12.00 each		0	\$0
Nitrate (EPA 353.2)	\$20.00 each		0	\$0
SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS				
Volatiles (TCL)	\$180.00 each		0	\$0
B/N/A (TCL)	\$400.00 each		0	\$0
Pest./PCBs (TCL)	\$180.00 each		0	\$0
Total Metals & CN(TAL)	\$170.00 each		0	\$0
Spec Cond(EPA 9050)	\$8.00 each		0	\$0
Total Organic Carbon (L. Kahn)	\$60.00 each		0	\$0
TOX (EPA 9056)	\$70.00 each		0	\$0
Chloride(EPA 9250)	\$25.00 each		0	\$0
pH (EPA 9045)	\$8.00 each		0	\$0
Nitrate (EPA 353.2)	\$20.00 each		0	\$0
Subtotal Team Laboratory				\$0
MISC. LABORATORY ANALYSIS				
Grain Size Dist	\$120.00 each		0	\$0
TCLP	\$1,500.00 each		0	\$0
Moisture Content	\$15.00 each		0	\$0
Bulk Density	\$35.00 each		0	\$0
Chromium (Level II)	\$30.00 each		0	\$0
Total Suspended Solids	\$20.00 each		0	\$0
Total Dissolved Solids	\$20.00 each		0	\$0
Ammonia	\$25.00 each		0	\$0
Phosphate	\$25.00 each		0	\$0
Cation Exchange Capacity	\$100.00 each		0	\$0

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 3
Monthly Field Activity Reports
6 Reports

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
RADIOLOGICAL LABORATORY ANALYSIS					
Water Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross Alpha&Beta	\$45.00	each	0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gamma Spectrometry	\$0.00	each	0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross Alpha&Beta	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subtotal Misc. Laboratory				\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	0	\$0	
Photogrammetry	Lump Sum	each	0	\$0	
IDW Disposal	Lump Sum	each	0	\$0	
Surveyor	Lump Sum	each	0	\$0	
Subtotal Investigation Subcontractors				\$0	
Subtotal Laboratory & Investigation Subcontractors:				\$0	
3% Mark-up:				\$0	
SUBTOTAL SUBCONTRACTORS:				\$0	
TASK TOTAL:				\$12,818	

Client:	U.S. Army Corps of Engineers Huntsville Division	Printed:	22-Mar-96	Parsons Engineering Science, Inc.
Project:	Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas SEAD-12 Annex E			Task # 4 Quarterly Reports 8 Reports
Prop No:	979002-00001			

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74 /hour		0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47 /hour		0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11 /hour		80	\$3,529	
Professional Level 5, Step 3 (P56)	\$37.99 /hour		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91 /hour		80	\$2,633	
Professional Level 5, Step 1 (P52)	\$29.39 /hour		0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13 /hour		0	\$0	
Professional Level 4, Step 1 (P42)	\$25.20 /hour		0	\$0	
Professional Level 3, Step 1 (P35)	\$24.04 /hour		0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09 /hour		0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89 /hour		0	\$0	
Professional Level 1, Step 2 (P18)	\$18.57 /hour		0	\$0	
Professional Level 1, Step 1 (P12)	\$14.84 /hour		0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10 /hour		0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58 /hour		0	\$0	
Technician Level 4, Step 1 (T42)	\$14.08 /hour		0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99 /hour		0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61 /hour		0	\$0	
Technician Level 2 (T25)	\$10.13 /hour		0	\$0	
Technician Level 1 (T15)	\$8.89 /hour		0	\$0	
Support Level 3 (S35)	\$20.61 /hour		0	\$0	
Support Level 2 (S25)	\$12.40 /hour		40	\$496	
Support Level 1 (S15)	\$8.72 /hour		0	\$0	
TOTAL HOURS/LABOR COST			200	\$6,658	
Contract Year:	1				
Base Yr					
Overhead Rate:	143%				
		Labor Burden:		\$9,520	
		SUBTOTAL BURDENED LABOR:		\$16,178	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 4
Quarterly Reports
8 Reports

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00	/roll	0	\$0	
40 mL VOA Vials	\$122.74	/case	0	\$0	
1 Liter Amber Bottles	\$37.95	/case	0	\$0	
32 oz. HDPE Bottles	\$30.75	/case	0	\$0	
Braided Nylon Rope	\$0.15	/foot	0	\$0	
Bubble Pack	\$84.00	/roll	0	\$0	
Decon Eqt	\$18.00	/kit	0	\$0	
55g drums fill/mov	\$100.00	each	0	\$0	
Field Notebook	\$14.00	each	0	\$0	
Ice	\$1.00	/bag	0	\$0	
Latex Gloves	\$10.00	/box	0	\$0	
Methanol (Optima)	\$25.00	/bottle	0	\$0	
Hexane (Optima)	\$25.00	/bottle	0	\$0	
Acetone (Optima)	\$50.00	/bottle	0	\$0	
HCl (Optima)	\$285.00	/bottle	0	\$0	
HNO3 (Optima)	\$175.00	/bottle	0	\$0	
Ascorbic Acid	\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0	
Overboots	\$4.00	/pair	0	\$0	
Respirator Cartridges	\$15.00	/pair	0	\$0	
Packing Tape (doz)	\$72.00	/case	0	\$0	
Padlocks	\$12.00	each	0	\$0	
Sampling Tables	\$40.00	each	0	\$0	
Radiological Badges	\$20.00	each	0	\$0	
Aluminum Foil	\$1.00	/roll	0	\$0	
Stain Stl bwl/spn	\$30.00	/set	0	\$0	
Survey Stake/Flag	\$20.00	/bundle	0	\$0	
Teflon tape	\$8.00	/roll	0	\$0	
Tyveks	\$6.30	each	0	\$0	
Water (HPLC Grade)	\$97.00	/case	0	\$0	
Ziplock bags	\$3.00	/box	0	\$0	
Calibration Gas	\$450.00	/tank	0	\$0	
Ultra Pure Air	\$310.00	/ton	0	\$0	
Teflon Tubing	\$120.00	/roll	0	\$0	
Teflon Sheeting	\$500.00	/roll	0	\$0	
Folding Live Traps	\$15.00	each	0	\$0	
Glassware	\$25.00	each	0	\$0	
Quartz Filters	\$10.00	each	0	\$0	
Vermiculite Packing	\$16.00	/bag	0	\$0	
SUBTOTAL MATLS & SUPPLIES:				\$0	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 4
Quarterly Reports
8 Reports

Prop No: 979002-00001

	<u>Unit</u>			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
<u>Notes</u>				
TRAVEL				
Airfare Boston\Syracuse	\$500.00	/trip	0	\$0
Airfare Boston\Huntsville	\$900.00	/trip	0	\$0
Subsistence-Seneca	\$96.00	/day	0	\$0
Subsistence-Huntsville	\$89.00	/day	0	\$0
Parking,Airport	\$13.00	/day	0	\$0
Auto Rental	\$55.00	/day	0	\$0
Suburban\Van rental	\$585.00	/week	0	\$0
Mileage	\$0.31	/mile	0	\$0
SUBTOTAL TRAVEL:				\$0
OTHERS				
IN-HOUSE SERVICES				
Telephone	\$4.00	/call	20	\$80
Word Proc/PC	\$3.70	/hour	20	\$74
CADD	\$5.00	/hour	0	\$0
Facsimile	\$1.00	/page	50	\$50
Overnight Express				
Letter/2 lb pack	\$14.50	each	56	\$812
Package (50 lbs)	\$96.25	each	0	\$0
Mail 4-lb pack	\$4.10	/pack	0	\$0
Mail letters	\$0.54	/letter	0	\$0
Subtotal Services				\$1,016
REPRODUCTION				
Photocopier	\$0.05	/page	500	\$25
Aerial Photo repro	\$10.00	/photo	0	\$0
Blueline repro	\$1.00	/Sheet	0	\$0
Cronoflex Prod	\$5.50	/Sq Ft	0	\$0
3-ring binders	\$15.00	each	0	\$0
Color Copies	\$2.00	/page	0	\$0
Subtotal Reproduction				\$25

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 4
Quarterly Reports
8 Reports

Prop No: 979002-00001

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00 /week		0	\$0	
Magnetometer	\$42.00 /week		0	\$0	
pH/Cond meter	\$50.00 /week		0	\$0	
Flow thru pH/Cond meter	\$257.00 /week		0	\$0	
DO meter	\$55.00 /week		0	\$0	
Soil Gas Supplies	\$50.00 /day		0	\$0	
Slug test eqt	\$50.00 /week		0	\$0	
Water level ind	\$40.00 /week		0	\$0	
Turbidimeter	\$30.00 /week		0	\$0	
Data Logger, Trnsdcr	\$135.00 /day		0	\$0	
Flow Meter	\$30.00 /week		0	\$0	
Water coolers	\$40.00 /month		0	\$0	
Equipment Trailer	\$1,000.00 /month		0	\$0	
Grundfus Redi Flow Pump	\$64.00 /day		0	\$0	
PUF Sampler	\$150.00 /week		0	\$0	
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0	
Hi- Vol Sampler	\$75.00 /week		0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00 /day		0	\$0	
Ponar Sediment Sampler	\$27.00 /day		0	\$0	
3.2 kw Generator	\$50.00 /day		0	\$0	
Seismograph	\$200.00 /day		0	\$0	
EM-31	\$85.00 /day		0	\$0	
GPR	\$500.00 /day		0	\$0	
Subtotal Rental				\$0	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00 /day		0	\$0	
Alpha Survey Meter	\$80.00 /week		0	\$0	
Alpha Scintillation Counter	\$100.00 /week		0	\$0	
Beta Sample Counter	\$100.00 /week		0	\$0	
Gas Proportional Detector	\$100.00 /week		0	\$0	
Gas Prop. Detector-Floor	\$100.00 /week		0	\$0	
Radon Monitor	\$300.00 /week		0	\$0	
Gamma Radiation Meter	\$50.00 /day		0	\$0	
Calib Gas	\$10.00 /day		0	\$0	
2-way radios	\$15.00 /ea/wk		0	\$0	
Air Purif Resp	\$20.00 /week		0	\$0	
10-Gal Eye Wash	\$35.00 /week		0	\$0	
Combination SCBA/SAR	\$150.00 /day		0	\$0	
Subtotal H & S				\$0	

SUBTOTAL OTHERS: \$1,041

SUBTOTAL LABOR & ODC'S: \$17,219

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 4
Quarterly Reports
8 Reports

Prop No: 979002-00001

	Unit				
	Cost	Units	Quantity	Cost	Notes

SUBCONTRACTORS

GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Iron(Ferrous)	\$30.00 each	0	\$0
Sulfide	\$30.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (EPA 9060)	\$25.00 each	0	\$0
TOX (EPA 9056)	\$50.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
BOD	\$60.00 each	0	\$0
Sulfate(EPA 300)	\$25.00 each	0	\$0
COD	\$50.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Volatiles (EPA 524)	\$195.00 each	0	\$0
Hardness(EPA 130.2)	\$15.00 each	0	\$0
Alkalinity(EPA 310)	\$12.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (L. Kahn)	\$60.00 each	0	\$0
TOX (EPA 9056)	\$70.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

Subtotal Team Laboratory			\$0
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MISC. LABORATORY ANALYSIS

Grain Size Dist	\$120.00 each	0	\$0
TCLP	\$1,500.00 each	0	\$0
Moisture Content	\$15.00 each	0	\$0
Bulk Density	\$35.00 each	0	\$0
Chromium (Level II)	\$30.00 each	0	\$0
Total Suspended Solids	\$20.00 each	0	\$0
Total Dissolved Solids	\$20.00 each	0	\$0
Ammonia	\$25.00 each	0	\$0
Phosphate	\$25.00 each	0	\$0
Cation Exchange Capacity	\$100.00 each	0	\$0

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 4
Quarterly Reports
8 Reports

Prop No: 979002-00001

	<u>Unit</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
RADIOLOGICAL LABORATORY ANALYSIS					
Water Samples For:					
Thorium 232, 230, 227	\$60.00 each		0	\$0	
Uranium 238, 235, 233+234	\$60.00 each		0	\$0	
Radium 226,223	\$40.00 each		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00 each		0	\$0	
Plutonium 239 + 240	\$65.00 each		0	\$0	
Americium 241	\$65.00 each		0	\$0	
Gross Alpha&Beta	\$45.00 each		0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00 each		0	\$0	
Uranium 238, 235, 233+234	\$60.00 each		0	\$0	
Radium 226,223	\$40.00 each		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00 each		0	\$0	
Plutonium 239 + 240	\$65.00 each		0	\$0	
Americium 241	\$65.00 each		0	\$0	
Gamma Spectrometry	\$0.00 each		0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00 each		0	\$0	
Sample Prep/Return	\$0.00 each		0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00 each		0	\$0	
Uranium 238, 235, 233+234	\$60.00 each		0	\$0	
Radium 226,223	\$40.00 each		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00 each		0	\$0	
Plutonium 239 + 240	\$65.00 each		0	\$0	
Americium 241	\$65.00 each		0	\$0	
Gross Alpha&Beta	\$45.00 each		0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00 each		0	\$0	
Metals	\$150.00 each		0	\$0	
Radon (Alpha Film)	\$25.00 each		0	\$0	
Subtotal Misc. Laboratory				\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum each		0	\$0	
Photogrammetry	Lump Sum each		0	\$0	
IDW Disposal	Lump Sum each		0	\$0	
Surveyor	Lump Sum each		0	\$0	
Subtotal Investigation Subcontractors				\$0	
Subtotal Laboratory & Investigation Subcontractors:				\$0	
3% Mark-up:				\$0	
SUBTOTAL SUBCONTRACTORS:				\$0	
TASK TOTAL:				\$17,219	

Client:	U.S. Army Corps of Engineers Huntsville Division	Printed:	22-Mar-96	Parsons Engineering Science, Inc.
Project:	Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas SEAD-12 Annex E			Task # 5 Field Sampling Letter Reports 1 Report
Prop No:	979002-00001			

	<u>Unit</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
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LABOR COSTS

ENGINEERS AND SCIENTISTS

Professional Level 6, Step 2 (P68)	\$58.74 /hour	0	\$0
Professional Level 6, Step 1 (P62)	\$46.47 /hour	0	\$0
Professional Level 5, Step 4 (P58)	\$44.11 /hour	16	\$706
Professional Level 5, Step 3 (P56)	\$37.99 /hour	0	\$0
Professional Level 5, Step 2 (P54)	\$32.91 /hour	16	\$527
Professional Level 5, Step 1 (P52)	\$29.39 /hour	0	\$0
Professional Level 4, Step 2 (P48)	\$29.13 /hour	0	\$0
Professional Level 4, Step 1 (P42)	\$25.20 /hour	80	\$2,016
Professional Level 3, Step 1 (P35)	\$24.04 /hour	0	\$0
Professional Level 2, Step 2 (P28)	\$23.09 /hour	0	\$0
Professional Level 2, Step 1 (P22)	\$19.89 /hour	0	\$0
Professional Level 1, Step 2 (P18)	\$18.57 /hour	0	\$0
Professional Level 1, Step 1 (P12)	\$14.84 /hour	0	\$0

TECHNICAL AND SUPPORT SPECIALISTS

Technician Level 5 (T55)	\$21.10 /hour	0	\$0
Technician Level 4, Step 2 (T48)	\$16.58 /hour	0	\$0
Technician Level 4, Step 1 (T42)	\$14.08 /hour	0	\$0
Technician Level 3, Step 2 (T38)	\$13.99 /hour	0	\$0
Technician Level 3, Step 1 (T32)	\$11.61 /hour	0	\$0
Technician Level 2 (T25)	\$10.13 /hour	0	\$0
Technician Level 1 (T15)	\$8.89 /hour	0	\$0
Support Level 3 (S35)	\$20.61 /hour	0	\$0
Support Level 2 (S25)	\$12.40 /hour	40	\$496
Support Level 1 (S15)	\$8.72 /hour	0	\$0

TOTAL HOURS/LABOR COST		152	\$3,744
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Contract Year: 1

Base Yr

Overhead Rate: 143%

Labor Burden: \$5,354

SUBTOTAL BURDENED LABOR: \$9,099

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 5
Field Sampling Letter Reports
1 Report

Prop No: 979002-00001

	Unit			
	Cost	Units	Quantity	Cost
MATERIALS AND SUPPLIES				
Bottle labels	\$20.00	/roll	0	\$0
40 mL VOA Vials	\$122.74	/case	0	\$0
1 Liter Amber Bottles	\$37.95	/case	0	\$0
32 oz. HDPE Bottles	\$30.75	/case	0	\$0
Braided Nylon Rope	\$0.15	/foot	0	\$0
Bubble Pack	\$84.00	/roll	0	\$0
Decon Eqt	\$18.00	/kit	0	\$0
55g drums fill/mov	\$100.00	each	0	\$0
Field Notebook	\$14.00	each	0	\$0
Ice	\$1.00	/bag	0	\$0
Latex Gloves	\$10.00	/box	0	\$0
Methanol (Optima)	\$25.00	/bottle	0	\$0
Hexane (Optima)	\$25.00	/bottle	0	\$0
Acetone (Optima)	\$50.00	/bottle	0	\$0
HCl (Optima)	\$285.00	/bottle	0	\$0
HNO3 (Optima)	\$175.00	/bottle	0	\$0
Ascorbic Acid	\$10.00	/bottle	0	\$0
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0
Overboots	\$4.00	/pair	0	\$0
Respirator Cartridges	\$15.00	/pair	0	\$0
Packing Tape (doz)	\$72.00	/case	0	\$0
Padlocks	\$12.00	each	0	\$0
Sampling Tables	\$40.00	each	0	\$0
Radiological Badges	\$20.00	each	0	\$0
Aluminum Foil	\$1.00	/roll	0	\$0
Stain Stl bwl/spn	\$30.00	/set	0	\$0
Survey Stake/Flag	\$20.00	/bundle	0	\$0
Teflon tape	\$8.00	/roll	0	\$0
Tyveks	\$6.30	each	0	\$0
Water (HPLC Grade)	\$97.00	/case	0	\$0
Ziplock bags	\$3.00	/box	0	\$0
Calibration Gas	\$450.00	/tank	0	\$0
Ultra Pure Air	\$310.00	/ton	0	\$0
Teflon Tubing	\$120.00	/roll	0	\$0
Teflon Sheeting	\$500.00	/roll	0	\$0
Folding Live Traps	\$15.00	each	0	\$0
Glassware	\$25.00	each	0	\$0
Quartz Filters	\$10.00	each	0	\$0
Vermiculite Packing	\$16.00	/bag	0	\$0
SUBTOTAL MATLS & SUPPLIES:				\$0

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 5
Field Sampling Letter Reports
1 Report

Prop No: 979002-00001

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
TRAVEL					
Airfare Boston\Syracuse	\$500.00 /trip		0	\$0	
Airfare Boston\Huntsville	\$900.00 /trip		0	\$0	
Subsistence-Seneca	\$96.00 /day		0	\$0	
Subsistence-Huntsville	\$89.00 /day		0	\$0	
Parking,Airport	\$13.00 /day		0	\$0	
Auto Rental	\$55.00 /day		0	\$0	
Suburban\Van rental	\$585.00 /week		0	\$0	
Mileage	\$0.31 /mile		0	\$0	
SUBTOTAL TRAVEL:				\$0	

OTHERS

IN-HOUSE SERVICES

Telephone	\$4.00 /call	20	\$80
Word Proc/PC	\$3.70 /hour	40	\$148
CADD	\$5.00 /hour	0	\$0
Facsimile	\$1.00 /page	50	\$50
Overnight Express			
Letter/2 lb pack	\$14.50 each	14	\$203
Package (50 lbs)	\$96.25 each	0	\$0
Mail 4-lb pack	\$4.10 /pack	0	\$0
Mail letters	\$0.54 /letter	0	\$0

Subtotal Services \$481

REPRODUCTION

Photocopier	\$0.05 /page	15000	\$750
Aerial Photo repro	\$10.00 /photo	0	\$0
Blueline repro	\$1.00 /Sheet	0	\$0
Cronoflex Prod	\$5.50 /Sq Ft	0	\$0
3-ring binders	\$15.00 each	0	\$0
Color Copies	\$2.00 /page	0	\$0

Subtotal Reproduction \$750

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 5
Field Sampling Letter Reports
1 Report

Prop No: 979002-00001

	<u>Unit</u>			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
<u>Notes</u>				
EQUIPMENT RENTAL				
EARTH SCIENCES EQUIPMENT				
Bailer	\$55.00 /week		0	\$0
Magnetometer	\$42.00 /week		0	\$0
pH/Cond meter	\$50.00 /week		0	\$0
Flow thru pH/Cond meter	\$257.00 /week		0	\$0
DO meter	\$55.00 /week		0	\$0
Soil Gas Supplies	\$50.00 /day		0	\$0
Slug test eqt	\$50.00 /week		0	\$0
Water level ind	\$40.00 /week		0	\$0
Turbidimeter	\$30.00 /week		0	\$0
Data Logger, Trnsdcr	\$135.00 /day		0	\$0
Flow Meter	\$30.00 /week		0	\$0
Water coolers	\$40.00 /month		0	\$0
Equipment Trailer	\$1,000.00 /month		0	\$0
Grundfus Redi Flow Pump	\$64.00 /day		0	\$0
PUF Sampler	\$150.00 /week		0	\$0
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0
Hi- Vol Sampler	\$75.00 /week		0	\$0
Hi- Vol Sampler Calibration Kit	\$25.00 /day		0	\$0
Ponar Sediment Sampler	\$27.00 /day		0	\$0
3.2 kw Generator	\$50.00 /day		0	\$0
Seismograph	\$200.00 /day		0	\$0
EM-31	\$85.00 /day		0	\$0
GPR	\$500.00 /day		0	\$0
Subtotal Rental				\$0
HEALTH & SAFETY EQUIPMENT				
HNu Meter	\$50.00 /day		0	\$0
Alpha Survey Meter	\$80.00 /week		0	\$0
Alpha Scintillation Counter	\$100.00 /week		0	\$0
Beta Sample Counter	\$100.00 /week		0	\$0
Gas Proportional Detector	\$100.00 /week		0	\$0
Gas Prop. Detector-Floor	\$100.00 /week		0	\$0
Radon Monitor	\$300.00 /week		0	\$0
Gamma Radiation Meter	\$50.00 /day		0	\$0
Calib Gas	\$10.00 /day		0	\$0
2-way radios	\$15.00 /ea/wk		0	\$0
Air Purif Resp	\$20.00 /week		0	\$0
10-Gal Eye Wash	\$35.00 /week		0	\$0
Combination SCBA/SAR	\$150.00 /day		0	\$0
Subtotal H & S				\$0

SUBTOTAL OTHERS: \$1,231

SUBTOTAL LABOR & ODC'S: \$10,330

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 5
Field Sampling Letter Reports
1 Report

Prop No: 979002-00001

	<u>Unit</u>			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
<u>Notes</u>				
SUBCONTRACTORS				
GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS				
Volatiles (TCL)	\$180.00	each	0	\$0
B/N/A (TCL)	\$400.00	each	0	\$0
Pest./PCBs (TCL)	\$180.00	each	0	\$0
Total Metals & CN(TAL)	\$170.00	each	0	\$0
Iron(Ferrous)	\$30.00	each	0	\$0
Sulfide	\$30.00	each	0	\$0
Spec Cond(EPA 9050)	\$8.00	each	0	\$0
Total Organic Carbon (EPA 9060)	\$25.00	each	0	\$0
TOX (EPA 9056)	\$50.00	each	0	\$0
Chloride(EPA 9250)	\$25.00	each	0	\$0
BOD	\$60.00	each	0	\$0
Sulfate(EPA 300)	\$25.00	each	0	\$0
COD	\$50.00	each	0	\$0
pH (EPA 9045)	\$8.00	each	0	\$0
Volatiles (EPA 524)	\$195.00	each	0	\$0
Hardness(EPA 130.2)	\$15.00	each	0	\$0
Alkalinity(EPA 310)	\$12.00	each	0	\$0
Nitrate (EPA 353.2)	\$20.00	each	0	\$0
SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS				
Volatiles (TCL)	\$180.00	each	0	\$0
B/N/A (TCL)	\$400.00	each	0	\$0
Pest./PCBs (TCL)	\$180.00	each	0	\$0
Total Metals & CN(TAL)	\$170.00	each	0	\$0
Spec Cond(EPA 9050)	\$8.00	each	0	\$0
Total Organic Carbon (L. Kahn)	\$60.00	each	0	\$0
TOX (EPA 9056)	\$70.00	each	0	\$0
Chloride(EPA 9250)	\$25.00	each	0	\$0
pH (EPA 9045)	\$8.00	each	0	\$0
Nitrate (EPA 353.2)	\$20.00	each	0	\$0
Subtotal Team Laboratory				\$0
MISC. LABORATORY ANALYSIS				
Grain Size Dist	\$120.00	each	0	\$0
TCLP	\$1,500.00	each	0	\$0
Moisture Content	\$15.00	each	0	\$0
Bulk Density	\$35.00	each	0	\$0
Chromium (Level II)	\$30.00	each	0	\$0
Total Suspended Solids	\$20.00	each	0	\$0
Total Dissolved Solids	\$20.00	each	0	\$0
Ammonia	\$25.00	each	0	\$0
Phosphate	\$25.00	each	0	\$0
Cation Exchange Capacity	\$100.00	each	0	\$0

Client:	U.S. Army Corps of Engineers Huntsville Division	Printed:	22-Mar-96	Parsons Engineering Science, Inc.
Project:	Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas SEAD-12 Annex E			Task # 5 Field Sampling Letter Reports 1 Report
Prop No:	979002-00001			

	<u>Unit</u>		<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
	<u>Cost</u>	<u>Units</u>			
RADIOLOGICAL LABORATORY ANALYSIS					
Water Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross Alpha&Beta	\$45.00	each	0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gamma Spectrometry	\$0.00	each	0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross Alpha&Beta	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subtotal Misc. Laboratory				\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	0	\$0	
Photogrammetry	Lump Sum	each	0	\$0	
IDW Disposal	Lump Sum	each	0	\$0	
Surveyor	Lump Sum	each	0	\$0	
Subtotal Investigation Subcontractors				\$0	
Subtotal Laboratory & Investigation Subcontractors:				\$0	
3% Mark-up:				\$0	
SUBTOTAL SUBCONTRACTORS:				\$0	
=====					
TASK TOTAL:				\$10,330	

Client:	U.S. Army Corps of Engineers Huntsville Division	Printed:	22-Mar-96	Parsons Engineering Science, Inc.
Project:	Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas SEAD-12 Annex E			Task # 6 Contaminant Fate and Transport
Prop No:	979002-00001			

	Unit Cost	Units	Quantity	Cost	Notes
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74 /hour		0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47 /hour		0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11 /hour		16	\$706	
Professional Level 5, Step 3 (P56)	\$37.99 /hour		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91 /hour		20	\$658	
Professional Level 5, Step 1 (P52)	\$29.39 /hour		0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13 /hour		100	\$2,913	
Professional Level 4, Step 1 (P42)	\$25.20 /hour		0	\$0	
Professional Level 3, Step 1 (P35)	\$24.04 /hour		0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09 /hour		0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89 /hour		0	\$0	
Professional Level 1, Step 2 (P18)	\$18.57 /hour		100	\$1,857	
Professional Level 1, Step 1 (P12)	\$14.84 /hour		0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10 /hour		0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58 /hour		0	\$0	
Technician Level 4, Step 1 (T42)	\$14.08 /hour		0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99 /hour		0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61 /hour		0	\$0	
Technician Level 2 (T25)	\$10.13 /hour		0	\$0	
Technician Level 1 (T15)	\$8.89 /hour		0	\$0	
Support Level 3 (S35)	\$20.61 /hour		0	\$0	
Support Level 2 (S25)	\$12.40 /hour		20	\$248	
Support Level 1 (S15)	\$8.72 /hour		0	\$0	
TOTAL HOURS/LABOR COST			256	\$6,382	
Contract Year:	1				
Base Yr					
Overhead Rate:	143%				
		Labor Burden:		\$9,126	
		SUBTOTAL BURDENED LABOR:		\$15,508	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 6
Contaminant Fate and Transport

Prop No: 979002-00001

	<u>Unit</u>			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
<u>Notes</u>				
MATERIALS AND SUPPLIES				
Bottle labels	\$20.00	/roll	0	\$0
40 mL VOA Vials	\$122.74	/case	0	\$0
1 Liter Amber Bottles	\$37.95	/case	0	\$0
32 oz. HDPE Bottles	\$30.75	/case	0	\$0
Braided Nylon Rope	\$0.15	/foot	0	\$0
Bubble Pack	\$84.00	/roll	0	\$0
Decon Eqt	\$18.00	/kit	0	\$0
55g drums fill/mov	\$100.00	each	0	\$0
Field Notebook	\$14.00	each	0	\$0
Ice	\$1.00	/bag	0	\$0
Latex Gloves	\$10.00	/box	0	\$0
Methanol (Optima)	\$25.00	/bottle	0	\$0
Hexane (Optima)	\$25.00	/bottle	0	\$0
Acetone (Optima)	\$50.00	/bottle	0	\$0
HCl (Optima)	\$285.00	/bottle	0	\$0
HNO3 (Optima)	\$175.00	/bottle	0	\$0
Ascorbic Acid	\$10.00	/bottle	0	\$0
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0
Overboots	\$4.00	/pair	0	\$0
Respirator Cartridges	\$15.00	/pair	0	\$0
Packing Tape (doz)	\$72.00	/case	0	\$0
Padlocks	\$12.00	each	0	\$0
Sampling Tables	\$40.00	each	0	\$0
Radiological Badges	\$20.00	each	0	\$0
Aluminum Foil	\$1.00	/roll	0	\$0
Stain Stl bwl/spn	\$30.00	/set	0	\$0
Survey Stake/Flag	\$20.00	/bundle	0	\$0
Teflon tape	\$8.00	/roll	0	\$0
Tyveks	\$6.30	each	0	\$0
Water (HPLC Grade)	\$97.00	/case	0	\$0
Ziplock bags	\$3.00	/box	0	\$0
Calibration Gas	\$450.00	/tank	0	\$0
Ultra Pure Air	\$310.00	/ton	0	\$0
Teflon Tubing	\$120.00	/roll	0	\$0
Teflon Sheeting	\$500.00	/roll	0	\$0
Folding Live Traps	\$15.00	each	0	\$0
Glassware	\$25.00	each	0	\$0
Quartz Filters	\$10.00	each	0	\$0
Vermiculite Packing	\$16.00	/bag	0	\$0
SUBTOTAL MATLS & SUPPLIES:				\$0

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 6
Contaminant Fate and Transport

Prop No: 979002-00001

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
TRAVEL					
Airfare Boston\Syracuse	\$500.00 /trip		0	\$0	
Airfare Boston\Huntsville	\$900.00 /trip		0	\$0	
Subsistence-Seneca	\$96.00 /day		0	\$0	
Subsistence-Huntsville	\$89.00 /day		0	\$0	
Parking,Airport	\$13.00 /day		0	\$0	
Auto Rental	\$55.00 /day		0	\$0	
Suburban\Van rental	\$585.00 /week		0	\$0	
Mileage	\$0.31 /mile		0	\$0	
SUBTOTAL TRAVEL:				\$0	

OTHERS

IN-HOUSE SERVICES

Telephone	\$4.00 /call	20	\$80
Word Proc/PC	\$3.70 /hour	0	\$0
CADD	\$5.00 /hour	0	\$0
Facsimile	\$1.00 /page	20	\$20
Overnight Express			
Letter/2 lb pack	\$14.50 each	0	\$0
Package (50 lbs)	\$96.25 each	0	\$0
Mail 4-lb pack	\$4.10 /pack	0	\$0
Mail letters	\$0.54 /letter	0	\$0

Subtotal Services \$100

REPRODUCTION

Photocopier	\$0.05 /page	1000	\$50
Aerial Photo repro	\$10.00 /photo	0	\$0
Blueline repro	\$1.00 /Sheet	0	\$0
Cronoflex Prod	\$5.50 /Sq Ft	0	\$0
3-ring binders	\$15.00 each	0	\$0
Color Copies	\$2.00 /page	0	\$0

Subtotal Reproduction \$50

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 6
Contaminant Fate and Transport

Prop No: 979002-00001

	<u>Unit</u>				
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	/week	0	\$0	
Magnetometer	\$42.00	/week	0	\$0	
pH/Cond meter	\$50.00	/week	0	\$0	
Flow thru pH/Cond meter	\$257.00	/week	0	\$0	
DO meter	\$55.00	/week	0	\$0	
Soil Gas Supplies	\$50.00	/day	0	\$0	
Slug test eqt	\$50.00	/week	0	\$0	
Water level ind	\$40.00	/week	0	\$0	
Turbidimeter	\$30.00	/week	0	\$0	
Data Logger, Trnsdcr	\$135.00	/day	0	\$0	
Flow Meter	\$30.00	/week	0	\$0	
Water coolers	\$40.00	/month	0	\$0	
Equipment Trailer	\$1,000.00	/month	0	\$0	
Grundfus Redi Flow Pump	\$64.00	/day	0	\$0	
PUF Sampler	\$150.00	/week	0	\$0	
PUF Sampler Calibration Kit	\$25.00	/day	0	\$0	
Hi- Vol Sampler	\$75.00	/week	0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00	/day	0	\$0	
Ponar Sediment Sampler	\$27.00	/day	0	\$0	
3.2 kw Generator	\$50.00	/day	0	\$0	
Seismograph	\$200.00	/day	0	\$0	
EM-31	\$85.00	/day	0	\$0	
GPR	\$500.00	/day	0	\$0	
Subtotal Rental				\$0	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00	/day	0	\$0	
Alpha Survey Meter	\$80.00	/week	0	\$0	
Alpha Scintillation Counter	\$100.00	/week	0	\$0	
Beta Sample Counter	\$100.00	/week	0	\$0	
Gas Proportional Detector	\$100.00	/week	0	\$0	
Gas Prop. Detector-Floor	\$100.00	/week	0	\$0	
Radon Monitor	\$300.00	/week	0	\$0	
Gamma Radiation Meter	\$50.00	/day	0	\$0	
Calib Gas	\$10.00	/day	0	\$0	
2-way radios	\$15.00	/ea/wk	0	\$0	
Air Purif Resp	\$20.00	/week	0	\$0	
10-Gal Eye Wash	\$35.00	/week	0	\$0	
Combination SCBA/SAR	\$150.00	/day	0	\$0	
Subtotal H & S				\$0	

SUBTOTAL OTHERS: \$150

SUBTOTAL LABOR & ODC'S: \$15,658

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 6
Contaminant Fate and Transport

Prop No: 979002-00001

	<u>Unit</u>				
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>

SUBCONTRACTORS

GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Iron(Ferrous)	\$30.00 each	0	\$0
Sulfide	\$30.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (EPA 9060)	\$25.00 each	0	\$0
TOX (EPA 9056)	\$50.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
BOD	\$60.00 each	0	\$0
Sulfate(EPA 300)	\$25.00 each	0	\$0
COD	\$50.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Volatiles (EPA 524)	\$195.00 each	0	\$0
Hardness(EPA 130.2)	\$15.00 each	0	\$0
Alkalinity(EPA 310)	\$12.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (L. Kahn)	\$60.00 each	0	\$0
TOX (EPA 9056)	\$70.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

Subtotal Team Laboratory	\$0
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MISC. LABORATORY ANALYSIS

Grain Size Dist	\$120.00 each	0	\$0
TCLP	\$1,500.00 each	0	\$0
Moisture Content	\$15.00 each	0	\$0
Bulk Density	\$35.00 each	0	\$0
Chromium (Level II)	\$30.00 each	0	\$0
Total Suspended Solids	\$20.00 each	0	\$0
Total Dissolved Solids	\$20.00 each	0	\$0
Ammonia	\$25.00 each	0	\$0
Phosphate	\$25.00 each	0	\$0
Cation Exchange Capacity	\$100.00 each	0	\$0

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 6
Contaminant Fate and Transport

Prop No: 979002-00001

	<u>Unit</u>		<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
	<u>Cost</u>	<u>Units</u>			
RADIOLOGICAL LABORATORY ANALYSIS					
Water Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross Alpha&Beta	\$45.00	each	0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gamma Spectrometry	\$0.00	each	0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross Alpha&Beta	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subtotal Misc. Laboratory				\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	0	\$0	
Photogrammetry	Lump Sum	each	0	\$0	
IDW Disposal	Lump Sum	each	0	\$0	
Surveyor	Lump Sum	each	0	\$0	
Subtotal Investigation Subcontractors				\$0	
Subtotal Laboratory & Investigation Subcontractors:				\$0	
3% Mark-up:				\$0	
SUBTOTAL SUBCONTRACTORS:				\$0	
				=====	
TASK TOTAL:				\$15,658	

Client:	U.S. Army Corps of Engineers Huntsville Division	Printed:	22-Mar-96	Parsons Engineering Science, Inc.
Project:	Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas SEAD-12 Annex E			Task # 7 Baseline Risk Assessment
Prop No:	979002-00001			

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
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LABOR COSTS

ENGINEERS AND SCIENTISTS

Professional Level 6, Step 2 (P68)	\$58.74 /hour	0	\$0
Professional Level 6, Step 1 (P62)	\$46.47 /hour	0	\$0
Professional Level 5, Step 4 (P58)	\$44.11 /hour	60	\$2,647
Professional Level 5, Step 3 (P56)	\$37.99 /hour	200	\$7,598
Professional Level 5, Step 2 (P54)	\$32.91 /hour	0	\$0
Professional Level 5, Step 1 (P52)	\$29.39 /hour	200	\$5,878
Professional Level 4, Step 2 (P48)	\$29.13 /hour	0	\$0
Professional Level 4, Step 1 (P42)	\$25.20 /hour	0	\$0
Professional Level 3, Step 1 (P35)	\$24.04 /hour	0	\$0
Professional Level 2, Step 2 (P28)	\$23.09 /hour	0	\$0
Professional Level 2, Step 1 (P22)	\$19.89 /hour	280	\$5,569
Professional Level 1, Step 2 (P18)	\$18.57 /hour	0	\$0
Professional Level 1, Step 1 (P12)	\$14.84 /hour	0	\$0

TECHNICAL AND SUPPORT SPECIALISTS

Technician Level 5 (T55)	\$21.10 /hour	0	\$0
Technician Level 4, Step 2 (T48)	\$16.58 /hour	0	\$0
Technician Level 4, Step 1 (T42)	\$14.08 /hour	0	\$0
Technician Level 3, Step 2 (T38)	\$13.99 /hour	0	\$0
Technician Level 3, Step 1 (T32)	\$11.61 /hour	0	\$0
Technician Level 2 (T25)	\$10.13 /hour	0	\$0
Technician Level 1 (T15)	\$8.89 /hour	0	\$0
Support Level 3 (S35)	\$20.61 /hour	0	\$0
Support Level 2 (S25)	\$12.40 /hour	60	\$744
Support Level 1 (S15)	\$8.72 /hour	0	\$0

TOTAL HOURS/LABOR COST		800	\$22,436
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Contract Year:	1		
Base Yr			
Overhead Rate:	143%	Labor Burden:	\$32,083
SUBTOTAL BURDENED LABOR:			\$54,519

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 7
Baseline Risk Assessment

Prop No: 979002-00001

	<u>Unit</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00 /roll		0	\$0	
40 mL VOA Vials	\$122.74 /case		0	\$0	
1 Liter Amber Bottles	\$37.95 /case		0	\$0	
32 oz. HDPE Bottles	\$30.75 /case		0	\$0	
Braided Nylon Rope	\$0.15 /foot		0	\$0	
Bubble Pack	\$84.00 /roll		0	\$0	
Decon Eqt	\$18.00 /kit		0	\$0	
55g drums fill/mov	\$100.00 each		0	\$0	
Field Notebook	\$14.00 each		0	\$0	
Ice	\$1.00 /bag		0	\$0	
Latex Gloves	\$10.00 /box		0	\$0	
Methanol (Optima)	\$25.00 /bottle		0	\$0	
Hexane (Optima)	\$25.00 /bottle		0	\$0	
Acetone (Optima)	\$50.00 /bottle		0	\$0	
HCl (Optima)	\$285.00 /bottle		0	\$0	
HNO3 (Optima)	\$175.00 /bottle		0	\$0	
Ascorbic Acid	\$10.00 /bottle		0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00 /box		0	\$0	
Overboots	\$4.00 /pair		0	\$0	
Respirator Cartridges	\$15.00 /pair		0	\$0	
Packing Tape (doz)	\$72.00 /case		0	\$0	
Padlocks	\$12.00 each		0	\$0	
Sampling Tables	\$40.00 each		0	\$0	
Radiological Badges	\$20.00 each		0	\$0	
Aluminum Foil	\$1.00 /roll		0	\$0	
Stain Stl bwl/spn	\$30.00 /set		0	\$0	
Survey Stake/Flag	\$20.00 /bundle		0	\$0	
Teflon tape	\$8.00 /roll		0	\$0	
Tyveks	\$6.30 each		0	\$0	
Water (HPLC Grade)	\$97.00 /case		0	\$0	
Ziplock bags	\$3.00 /box		0	\$0	
Calibration Gas	\$450.00 /tank		0	\$0	
Ultra Pure Air	\$310.00 /ton		0	\$0	
Teflon Tubing	\$120.00 /roll		0	\$0	
Teflon Sheeting	\$500.00 /roll		0	\$0	
Folding Live Traps	\$15.00 each		0	\$0	
Glassware	\$25.00 each		0	\$0	
Quartz Filters	\$10.00 each		0	\$0	
Vermiculite Packing	\$16.00 /bag		0	\$0	
SUBTOTAL MATLS & SUPPLIES:				\$0	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 7
Baseline Risk Assessment

Prop No: 979002-00001

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
TRAVEL					
Airfare Boston\Syracuse	\$500.00 /trip		0	\$0	
Airfare Boston\Huntsville	\$900.00 /trip		0	\$0	
Subsistence-Seneca	\$96.00 /day		0	\$0	
Subsistence-Huntsville	\$89.00 /day		0	\$0	
Parking,Airport	\$13.00 /day		0	\$0	
Auto Rental	\$55.00 /day		0	\$0	
Suburban\Van rental	\$585.00 /week		0	\$0	
Mileage	\$0.31 /mile		0	\$0	
SUBTOTAL TRAVEL:				\$0	
OTHERS					
IN-HOUSE SERVICES					
Telephone	\$4.00 /call		30	\$120	
Word Proc/PC	\$3.70 /hour		80	\$296	
CADD	\$5.00 /hour		0	\$0	
Facsimile	\$1.00 /page		100	\$100	
Overnight Express					
Letter/2 lb pack	\$14.50 each		20	\$290	
Package (50 lbs)	\$96.25 each		0	\$0	
Mail 4-lb pack	\$4.10 /pack		0	\$0	
Mail letters	\$0.54 /letter		0	\$0	
Subtotal Services				\$806	
REPRODUCTION					
Photocopier	\$0.05 /page		5000	\$250	
Aerial Photo repro	\$10.00 /photo		0	\$0	
Blue-line repro	\$1.00 /Sheet		0	\$0	
Cronoflex Prod	\$5.50 /Sq Ft		0	\$0	
3-ring binders	\$15.00 each		0	\$0	
Color Copies	\$2.00 /page		0	\$0	
Subtotal Reproduction				\$250	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 7
Baseline Risk Assessment

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00 /week		0	\$0	
Magnetometer	\$42.00 /week		0	\$0	
pH/Cond meter	\$50.00 /week		0	\$0	
Flow thru pH/Cond meter	\$257.00 /week		0	\$0	
DO meter	\$55.00 /week		0	\$0	
Soil Gas Supplies	\$50.00 /day		0	\$0	
Slug test eqt	\$50.00 /week		0	\$0	
Water level ind	\$40.00 /week		0	\$0	
Turbidimeter	\$30.00 /week		0	\$0	
Data Logger, Trnsdcr	\$135.00 /day		0	\$0	
Flow Meter	\$30.00 /week		0	\$0	
Water coolers	\$40.00 /month		0	\$0	
Equipment Trailer	\$1,000.00 /month		0	\$0	
Grundfus Redi Flow Pump	\$64.00 /day		0	\$0	
PUF Sampler	\$150.00 /week		0	\$0	
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0	
Hi- Vol Sampler	\$75.00 /week		0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00 /day		0	\$0	
Ponar Sediment Sampler	\$27.00 /day		0	\$0	
3.2 kw Generator	\$50.00 /day		0	\$0	
Seismograph	\$200.00 /day		0	\$0	
EM-31	\$85.00 /day		0	\$0	
GPR	\$500.00 /day		0	\$0	
Subtotal Rental				\$0	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00 /day		0	\$0	
Alpha Survey Meter	\$80.00 /week		0	\$0	
Alpha Scintillation Counter	\$100.00 /week		0	\$0	
Beta Sample Counter	\$100.00 /week		0	\$0	
Gas Proportional Detector	\$100.00 /week		0	\$0	
Gas Prop. Detector-Floor	\$100.00 /week		0	\$0	
Radon Monitor	\$300.00 /week		0	\$0	
Gamma Radiation Meter	\$50.00 /day		0	\$0	
Calib Gas	\$10.00 /day		0	\$0	
2-way radios	\$15.00 /ea/wk		0	\$0	
Air Purif Resp	\$20.00 /week		0	\$0	
10-Gal Eye Wash	\$35.00 /week		0	\$0	
Combination SCBA/SAR	\$150.00 /day		0	\$0	
Subtotal H & S				\$0	

SUBTOTAL OTHERS: \$1,056

SUBTOTAL LABOR & ODC'S: \$55,575

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 7
Baseline Risk Assessment

Prop No: 979002-00001

	<u>Unit</u>				
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>

SUBCONTRACTORS

GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Iron(Ferrous)	\$30.00 each	0	\$0
Sulfide	\$30.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (EPA 9060)	\$25.00 each	0	\$0
TOX (EPA 9056)	\$50.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
BOD	\$60.00 each	0	\$0
Sulfate(EPA 300)	\$25.00 each	0	\$0
COD	\$50.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Volatiles (EPA 524)	\$195.00 each	0	\$0
Hardness(EPA 130.2)	\$15.00 each	0	\$0
Alkalinity(EPA 310)	\$12.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (L. Kahn)	\$60.00 each	0	\$0
TOX (EPA 9056)	\$70.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

Subtotal Team Laboratory			\$0
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MISC. LABORATORY ANALYSIS

Grain Size Dist	\$120.00 each	0	\$0
TCLP	\$1,500.00 each	0	\$0
Moisture Content	\$15.00 each	0	\$0
Bulk Density	\$35.00 each	0	\$0
Chromium (Level II)	\$30.00 each	0	\$0
Total Suspended Solids	\$20.00 each	0	\$0
Total Dissolved Solids	\$20.00 each	0	\$0
Ammonia	\$25.00 each	0	\$0
Phosphate	\$25.00 each	0	\$0
Cation Exchange Capacity	\$100.00 each	0	\$0

Client: U.S. Army Corps of Engineers Huntsville Division	Printed: 22-Mar-96	Parsons Engineering Science, Inc.
Project: Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas SEAD-12 Annex E		Task # 7 Baseline Risk Assessment
Prop No: 979002-00001		

	Unit Cost	Units	Quantity	Cost	Notes
RADIOLOGICAL LABORATORY ANALYSIS					
Water Samples For:					
Thorium 232, 230, 227	\$60.00 each		0	\$0	
Uranium 238, 235, 233+234	\$60.00 each		0	\$0	
Radium 226,223	\$40.00 each		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00 each		0	\$0	
Plutonium 239 + 240	\$65.00 each		0	\$0	
Americium 241	\$65.00 each		0	\$0	
Gross Alpha&Beta	\$45.00 each		0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00 each		0	\$0	
Uranium 238, 235, 233+234	\$60.00 each		0	\$0	
Radium 226,223	\$40.00 each		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00 each		0	\$0	
Plutonium 239 + 240	\$65.00 each		0	\$0	
Americium 241	\$65.00 each		0	\$0	
Gamma Spectrometry	\$0.00 each		0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00 each		0	\$0	
Sample Prep/Return	\$0.00 each		0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00 each		0	\$0	
Uranium 238, 235, 233+234	\$60.00 each		0	\$0	
Radium 226,223	\$40.00 each		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00 each		0	\$0	
Plutonium 239 + 240	\$65.00 each		0	\$0	
Americium 241	\$65.00 each		0	\$0	
Gross Alpha&Beta	\$45.00 each		0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00 each		0	\$0	
Metals	\$150.00 each		0	\$0	
Radon (Alpha Film)	\$25.00 each		0	\$0	
Subtotal Misc. Laboratory				\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum each		0	\$0	
Photogrammetry	Lump Sum each		0	\$0	
IDW Disposal	Lump Sum each		0	\$0	
Surveyor	Lump Sum each		0	\$0	
Subtotal Investigation Subcontractors				\$0	
Subtotal Laboratory & Investigation Subcontractors:				\$0	
3% Mark-up:				\$0	
SUBTOTAL SUBCONTRACTORS:				\$0	
				=====	
TASK TOTAL:				\$55,575	

Client:	U.S. Army Corps of Engineers Huntsville Division	Printed:	22-Mar-96	Parsons Engineering Science, Inc.
Project:	Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas SEAD-12 Annex E			Task # 8 RI Report Pre-Draft,Draft, Draft-Final,Final
Prop No:	979002-00001			

	Unit Cost	Units	Quantity	Cost	Notes
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74 /hour		0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47 /hour		0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11 /hour		80	\$3,529	
Professional Level 5, Step 3 (P56)	\$37.99 /hour		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91 /hour		200	\$6,582	
Professional Level 5, Step 1 (P52)	\$29.39 /hour		0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13 /hour		200	\$5,826	
Professional Level 4, Step 1 (P42)	\$25.20 /hour		0	\$0	
Professional Level 3, Step 1 (P35)	\$24.04 /hour		0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09 /hour		0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89 /hour		0	\$0	
Professional Level 1, Step 2 (P18)	\$18.57 /hour		300	\$5,571	
Professional Level 1, Step 1 (P12)	\$14.84 /hour		0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10 /hour		80	\$1,688	
Technician Level 4, Step 2 (T48)	\$16.58 /hour		0	\$0	
Technician Level 4, Step 1 (T42)	\$14.08 /hour		0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99 /hour		0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61 /hour		0	\$0	
Technician Level 2 (T25)	\$10.13 /hour		0	\$0	
Technician Level 1 (T15)	\$8.89 /hour		0	\$0	
Support Level 3 (S35)	\$20.61 /hour		0	\$0	
Support Level 2 (S25)	\$12.40 /hour		140	\$1,736	
Support Level 1 (S15)	\$8.72 /hour		0	\$0	
TOTAL HOURS/LABOR COST			1000	\$24,932	
Contract Year:	1				
Base Yr					
Overhead Rate:	143%				
		Labor Burden:		\$35,652	
		SUBTOTAL BURDENED LABOR:		\$60,584	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 8
RI Report
Pre-Draft,Draft,
Draft-Final,Final

Prop No: 979002-00001

	Unit			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
MATERIALS AND SUPPLIES				
Bottle labels	\$20.00	/roll	0	\$0
40 mL VOA Vials	\$122.74	/case	0	\$0
1 Liter Amber Bottles	\$37.95	/case	0	\$0
32 oz. HDPE Bottles	\$30.75	/case	0	\$0
Braided Nylon Rope	\$0.15	/foot	0	\$0
Bubble Pack	\$84.00	/roll	0	\$0
Decon Eqt	\$18.00	/kit	0	\$0
55g drums fill/mov	\$100.00	each	0	\$0
Field Notebook	\$14.00	each	0	\$0
Ice	\$1.00	/bag	0	\$0
Latex Gloves	\$10.00	/box	0	\$0
Methanol (Optima)	\$25.00	/bottle	0	\$0
Hexane (Optima)	\$25.00	/bottle	0	\$0
Acetone (Optima)	\$50.00	/bottle	0	\$0
HCl (Optima)	\$285.00	/bottle	0	\$0
HNO3 (Optima)	\$175.00	/bottle	0	\$0
Ascorbic Acid	\$10.00	/bottle	0	\$0
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0
Overboots	\$4.00	/pair	0	\$0
Respirator Cartridges	\$15.00	/pair	0	\$0
Packing Tape (doz)	\$72.00	/case	0	\$0
Padlocks	\$12.00	each	0	\$0
Sampling Tables	\$40.00	each	0	\$0
Radiological Badges	\$20.00	each	0	\$0
Aluminum Foil	\$1.00	/roll	0	\$0
Stain Stl bwl/spn	\$30.00	/set	0	\$0
Survey Stake/Flag	\$20.00	/bundle	0	\$0
Teflon tape	\$8.00	/roll	0	\$0
Tyveks	\$6.30	each	0	\$0
Water (HPLC Grade)	\$97.00	/case	0	\$0
Ziplock bags	\$3.00	/box	0	\$0
Calibration Gas	\$450.00	/tank	0	\$0
Ultra Pure Air	\$310.00	/ton	0	\$0
Teflon Tubing	\$120.00	/roll	0	\$0
Teflon Sheeting	\$500.00	/roll	0	\$0
Folding Live Traps	\$15.00	each	0	\$0
Glassware	\$25.00	each	0	\$0
Quartz Filters	\$10.00	each	0	\$0
Vermiculite Packing	\$16.00	/bag	0	\$0
SUBTOTAL MATLS & SUPPLIES:				\$0

Client:	U.S. Army Corps of Engineers Huntsville Division	Printed:	22-Mar-96	Parsons Engineering Science, Inc.
Project:	Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas SEAD-12 Annex E			Task # 8 RI Report Pre-Draft,Draft, Draft-Final,Final
Prop No:	979002-00001			

	Unit			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
				<u>Notes</u>
TRAVEL				
Airfare Boston\Syracuse	\$500.00	/trip	0	\$0
Airfare Boston\Huntsville	\$900.00	/trip	0	\$0
Subsistence-Seneca	\$96.00	/day	0	\$0
Subsistence-Huntsville	\$89.00	/day	0	\$0
Parking,Airport	\$13.00	/day	0	\$0
Auto Rental	\$55.00	/day	0	\$0
Suburban\Van rental	\$585.00	/week	0	\$0
Mileage	\$0.31	/mile	0	\$0
SUBTOTAL TRAVEL:				\$0
OTHERS				
IN-HOUSE SERVICES				
Telephone	\$4.00	/call	100	\$400
Word Proc/PC	\$3.70	/hour	120	\$444
CADD	\$5.00	/hour	100	\$500
Facsimile	\$1.00	/page	500	\$500
Overnight Express				
Letter/2 lb pack	\$14.50	each	0	\$0
Package (50 lbs)	\$96.25	each	85	\$8,181
Mail 4-lb pack	\$4.10	/pack	0	\$0
Mail letters	\$0.54	/letter	0	\$0
Subtotal Services				\$10,025
REPRODUCTION				
Photocopier	\$0.05	/page	203000	\$10,150
Aerial Photo repro	\$10.00	/photo	0	\$0
Blueline repro	\$1.00	/Sheet	2030	\$2,030
Cronoflex Prod	\$5.50	/Sq Ft	0	\$0
3-ring binders	\$15.00	each	300	\$4,500
Color Copies	\$2.00	/page	1015	\$2,030
Subtotal Reproduction				\$18,710

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 8
RI Report
Pre-Draft,Draft,
Draft-Final,Final

Prop No: 979002-00001

	<u>Unit</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00 /week		0	\$0	
Magnetometer	\$42.00 /week		0	\$0	
pH/Cond meter	\$50.00 /week		0	\$0	
Flow thru pH/Cond meter	\$257.00 /week		0	\$0	
DO meter	\$55.00 /week		0	\$0	
Soil Gas Supplies	\$50.00 /day		0	\$0	
Slug test eqt	\$50.00 /week		0	\$0	
Water level ind	\$40.00 /week		0	\$0	
Turbidimeter	\$30.00 /week		0	\$0	
Data Logger,Trnsdcr	\$135.00 /day		0	\$0	
Flow Meter	\$30.00 /week		0	\$0	
Water coolers	\$40.00 /month		0	\$0	
Equipment Trailer	\$1,000.00 /month		0	\$0	
Grundfus Redi Flow Pump	\$64.00 /day		0	\$0	
PUF Sampler	\$150.00 /week		0	\$0	
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0	
Hi- Vol Sampler	\$75.00 /week		0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00 /day		0	\$0	
Ponar Sediment Sampler	\$27.00 /day		0	\$0	
3.2 kw Generator	\$50.00 /day		0	\$0	
Seismograph	\$200.00 /day		0	\$0	
EM-31	\$85.00 /day		0	\$0	
GPR	\$500.00 /day		0	\$0	
Subtotal Rental				\$0	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00 /day		0	\$0	
Alpha Survey Meter	\$80.00 /week		0	\$0	
Alpha Scintillation Counter	\$100.00 /week		0	\$0	
Beta Sample Counter	\$100.00 /week		0	\$0	
Gas Proportional Detector	\$100.00 /week		0	\$0	
Gas Prop. Detector-Floor	\$100.00 /week		0	\$0	
Radon Monitor	\$300.00 /week		0	\$0	
Gamma Radiation Meter	\$50.00 /day		0	\$0	
Calib Gas	\$10.00 /day		0	\$0	
2-way radios	\$15.00 /ea/wk		0	\$0	
Air Purif Resp	\$20.00 /week		0	\$0	
10-Gal Eye Wash	\$35.00 /week		0	\$0	
Combination SCBA/SAR	\$150.00 /day		0	\$0	
Subtotal H & S				\$0	

SUBTOTAL OTHERS: \$28,735

SUBTOTAL LABOR & ODC'S: \$89,320

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 8
RI Report
Pre-Draft,Draft,
Draft-Final,Final

Prop No: 979002-00001

Unit				
Cost	Units	Quantity	Cost	Notes

SUBCONTRACTORS

GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Iron(Ferrous)	\$30.00 each	0	\$0
Sulfide	\$30.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (EPA 9060)	\$25.00 each	0	\$0
TOX (EPA 9056)	\$50.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
BOD	\$60.00 each	0	\$0
Sulfate(EPA 300)	\$25.00 each	0	\$0
COD	\$50.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Volatiles (EPA 524)	\$195.00 each	0	\$0
Hardness(EPA 130.2)	\$15.00 each	0	\$0
Alkalinity(EPA 310)	\$12.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (L. Kahn)	\$60.00 each	0	\$0
TOX (EPA 9056)	\$70.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

Subtotal Team Laboratory			\$0
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MISC. LABORATORY ANALYSIS

Grain Size Dist	\$120.00 each	0	\$0
TCLP	\$1,500.00 each	0	\$0
Moisture Content	\$15.00 each	0	\$0
Bulk Density	\$35.00 each	0	\$0
Chromium (Level II)	\$30.00 each	0	\$0
Total Suspended Solids	\$20.00 each	0	\$0
Total Dissolved Solids	\$20.00 each	0	\$0
Ammonia	\$25.00 each	0	\$0
Phosphate	\$25.00 each	0	\$0
Cation Exchange Capacity	\$100.00 each	0	\$0

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 8
RI Report
Pre-Draft,Draft,
Draft-Final,Final

Prop No: 979002-00001

	Unit			
	Cost	Units	Quantity	Cost
Notes				
RADIOLOGICAL LABORATORY ANALYSIS				
Water Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gross Alpha&Beta	\$45.00	each	0	\$0
Soil Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gamma Spectrometry	\$0.00	each	0	\$0
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0
Sample Prep/Return	\$0.00	each	0	\$0
Wipe Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gross Alpha&Beta	\$45.00	each	0	\$0
AIR SAMPLES LABORATORY ANALYSIS				
SVOC's	\$490.00	each	0	\$0
Metals	\$150.00	each	0	\$0
Radon (Alpha Film)	\$25.00	each	0	\$0
Subtotal Misc. Laboratory				\$0
INVESTIGATION SUBCONTRACTORS				
Driller	Lump Sum	each	0	\$0
Photogrammetry	Lump Sum	each	0	\$0
IDW Disposal	Lump Sum	each	0	\$0
Surveyor	Lump Sum	each	0	\$0
Subtotal Investigation Subcontractors				\$0
Subtotal Laboratory & Investigation Subcontractors:				\$0
3% Mark-up:				\$0
SUBTOTAL SUBCONTRACTORS:				\$0
=====				
TASK TOTAL:				\$89,320

Client:	U.S. Army Corps of Engineers Huntsville Division	Printed:	22-Mar-96	Parsons Engineering Science, Inc.
Project:	Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas SEAD-12 Annex E			Task # 9 Treatability Study Requirements Assessment
Prop No:	979002-00001			

	Unit Cost	Units	Quantity	Cost	Notes
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74 /hour		0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47 /hour		0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11 /hour		30	\$1,323	
Professional Level 5, Step 3 (P56)	\$37.99 /hour		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91 /hour		45	\$1,481	
Professional Level 5, Step 1 (P52)	\$29.39 /hour		0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13 /hour		0	\$0	
Professional Level 4, Step 1 (P42)	\$25.20 /hour		45	\$1,134	
Professional Level 3, Step 1 (P35)	\$24.04 /hour		0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09 /hour		0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89 /hour		0	\$0	
Professional Level 1, Step 2 (P18)	\$18.57 /hour		0	\$0	
Professional Level 1, Step 1 (P12)	\$14.84 /hour		0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10 /hour		0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58 /hour		0	\$0	
Technician Level 4, Step 1 (T42)	\$14.08 /hour		0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99 /hour		0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61 /hour		0	\$0	
Technician Level 2 (T25)	\$10.13 /hour		0	\$0	
Technician Level 1 (T15)	\$8.89 /hour		0	\$0	
Support Level 3 (S35)	\$20.61 /hour		0	\$0	
Support Level 2 (S25)	\$12.40 /hour		20	\$248	
Support Level 1 (S15)	\$8.72 /hour		0	\$0	
TOTAL HOURS/LABOR COST			140	\$4,186	
Contract Year:	1				
Base Yr					
Overhead Rate:	143%		Labor Burden:	\$5,986	
SUBTOTAL BURDENED LABOR:				\$10,173	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 9
Treatability Study
Requirements Assessment

Prop No: 979002-00001

	<u>Unit</u>	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
MATERIALS AND SUPPLIES						
Bottle labels	\$20.00 /roll			0	\$0	
40 mL VOA Vials	\$122.74 /case			0	\$0	
1 Liter Amber Bottles	\$37.95 /case			0	\$0	
32 oz. HDPE Bottles	\$30.75 /case			0	\$0	
Braided Nylon Rope	\$0.15 /foot			0	\$0	
Bubble Pack	\$84.00 /roll			0	\$0	
Decon Eqt	\$18.00 /kit			0	\$0	
55g drums fill/mov	\$100.00 each			0	\$0	
Field Notebook	\$14.00 each			0	\$0	
Ice	\$1.00 /bag			0	\$0	
Latex Gloves	\$10.00 /box			0	\$0	
Methanol (Optima)	\$25.00 /bottle			0	\$0	
Hexane (Optima)	\$25.00 /bottle			0	\$0	
Acetone (Optima)	\$50.00 /bottle			0	\$0	
HCl (Optima)	\$285.00 /bottle			0	\$0	
HNO3 (Optima)	\$175.00 /bottle			0	\$0	
Ascorbic Acid	\$10.00 /bottle			0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00 /box			0	\$0	
Overboots	\$4.00 /pair			0	\$0	
Respirator Cartridges	\$15.00 /pair			0	\$0	
Packing Tape (doz)	\$72.00 /case			0	\$0	
Padlocks	\$12.00 each			0	\$0	
Sampling Tables	\$40.00 each			0	\$0	
Radiological Badges	\$20.00 each			0	\$0	
Aluminum Foil	\$1.00 /roll			0	\$0	
Stain Stl bwl/spn	\$30.00 /set			0	\$0	
Survey Stake/Flag	\$20.00 /bundle			0	\$0	
Teflon tape	\$8.00 /roll			0	\$0	
Tyveks	\$6.30 each			0	\$0	
Water (HPLC Grade)	\$97.00 /case			0	\$0	
Ziplock bags	\$3.00 /box			0	\$0	
Calibration Gas	\$450.00 /tank			0	\$0	
Ultra Pure Air	\$310.00 /ton			0	\$0	
Teflon Tubing	\$120.00 /roll			0	\$0	
Teflon Sheeting	\$500.00 /roll			0	\$0	
Folding Live Traps	\$15.00 each			0	\$0	
Glassware	\$25.00 each			0	\$0	
Quartz Filters	\$10.00 each			0	\$0	
Vermiculite Packing	\$16.00 /bag			0	\$0	
SUBTOTAL MATLS & SUPPLIES:					\$0	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 9
Treatability Study
Requirements Assessment

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
TRAVEL					
Airfare Boston\Syracuse	\$500.00 /trip		0	\$0	
Airfare Boston\Huntsville	\$900.00 /trip		0	\$0	
Subsistence-Seneca	\$96.00 /day		0	\$0	
Subsistence-Huntsville	\$89.00 /day		0	\$0	
Parking,Airport	\$13.00 /day		0	\$0	
Auto Rental	\$55.00 /day		0	\$0	
Suburban\Van rental	\$585.00 /week		0	\$0	
Mileage	\$0.31 /mile		0	\$0	
SUBTOTAL TRAVEL:				\$0	
OTHERS					
IN-HOUSE SERVICES					
Telephone	\$4.00 /call		50	\$200	
Word Proc/PC	\$3.70 /hour		20	\$74	
CADD	\$5.00 /hour		0	\$0	
Facsimile	\$1.00 /page		100	\$100	
Overnight Express					
Letter/2 lb pack	\$14.50 each		0	\$0	
Package (50 lbs)	\$96.25 each		0	\$0	
Mail 4-lb pack	\$4.10 /pack		0	\$0	
Mail letters	\$0.54 /letter		0	\$0	
Subtotal Services				\$374	
REPRODUCTION					
Photocopier	\$0.05 /page		1000	\$50	
Aerial Photo repro	\$10.00 /photo		0	\$0	
Blueline repro	\$1.00 /Sheet		0	\$0	
Cronoflex Prod	\$5.50 /Sq Ft		0	\$0	
3-ring binders	\$15.00 each		0	\$0	
Color Copies	\$2.00 /page		0	\$0	
Subtotal Reproduction				\$50	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 9
Treatability Study
Requirements Assessment

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00 /week		0	\$0	
Magnetometer	\$42.00 /week		0	\$0	
pH/Cond meter	\$50.00 /week		0	\$0	
Flow thru pH/Cond meter	\$257.00 /week		0	\$0	
DO meter	\$55.00 /week		0	\$0	
Soil Gas Supplies	\$50.00 /day		0	\$0	
Slug test eqt	\$50.00 /week		0	\$0	
Water level ind	\$40.00 /week		0	\$0	
Turbidimeter	\$30.00 /week		0	\$0	
Data Logger,Trnsdcr	\$135.00 /day		0	\$0	
Flow Meter	\$30.00 /week		0	\$0	
Water coolers	\$40.00 /month		0	\$0	
Equipment Trailer	\$1,000.00 /month		0	\$0	
Grundfus Redi Flow Pump	\$64.00 /day		0	\$0	
PUF Sampler	\$150.00 /week		0	\$0	
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0	
Hi- Vol Sampler	\$75.00 /week		0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00 /day		0	\$0	
Ponar Sediment Sampler	\$27.00 /day		0	\$0	
3.2 kw Generator	\$50.00 /day		0	\$0	
Seismograph	\$200.00 /day		0	\$0	
EM-31	\$85.00 /day		0	\$0	
GPR	\$500.00 /day		0	\$0	
Subtotal Rental				\$0	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00 /day		0	\$0	
Alpha Survey Meter	\$80.00 /week		0	\$0	
Alpha Scintillation Counter	\$100.00 /week		0	\$0	
Beta Sample Counter	\$100.00 /week		0	\$0	
Gas Proportional Detector	\$100.00 /week		0	\$0	
Gas Prop. Detector-Floor	\$100.00 /week		0	\$0	
Radon Monitor	\$300.00 /week		0	\$0	
Gamma Radiation Meter	\$50.00 /day		0	\$0	
Calib Gas	\$10.00 /day		0	\$0	
2-way radios	\$15.00 /ea/wk		0	\$0	
Air Purif Resp	\$20.00 /week		0	\$0	
10-Gal Eye Wash	\$35.00 /week		0	\$0	
Combination SCBA/SAR	\$150.00 /day		0	\$0	
Subtotal H & S				\$0	
SUBTOTAL OTHERS:				\$424	
SUBTOTAL LABOR & ODC'S:				\$10,597	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 9
Treatability Study
Requirements Assessment

Prop No: 979002-00001

	Unit			
	Cost	Units	Quantity	Cost
Notes				
SUBCONTRACTORS				
GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS				
Volatiles (TCL)	\$180.00	each	0	\$0
B/N/A (TCL)	\$400.00	each	0	\$0
Pest./PCBs (TCL)	\$180.00	each	0	\$0
Total Metals & CN(TAL)	\$170.00	each	0	\$0
Iron(Ferrous)	\$30.00	each	0	\$0
Sulfide	\$30.00	each	0	\$0
Spec Cond(EPA 9050)	\$8.00	each	0	\$0
Total Organic Carbon (EPA 9060)	\$25.00	each	0	\$0
TOX (EPA 9056)	\$50.00	each	0	\$0
Chloride(EPA 9250)	\$25.00	each	0	\$0
BOD	\$60.00	each	0	\$0
Sulfate(EPA 300)	\$25.00	each	0	\$0
COD	\$50.00	each	0	\$0
pH (EPA 9045)	\$8.00	each	0	\$0
Volatiles (EPA 524)	\$195.00	each	0	\$0
Hardness(EPA 130.2)	\$15.00	each	0	\$0
Alkalinity(EPA 310)	\$12.00	each	0	\$0
Nitrate (EPA 353.2)	\$20.00	each	0	\$0
SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS				
Volatiles (TCL)	\$180.00	each	0	\$0
B/N/A (TCL)	\$400.00	each	0	\$0
Pest./PCBs (TCL)	\$180.00	each	0	\$0
Total Metals & CN(TAL)	\$170.00	each	0	\$0
Spec Cond(EPA 9050)	\$8.00	each	0	\$0
Total Organic Carbon (L. Kahn)	\$60.00	each	0	\$0
TOX (EPA 9056)	\$70.00	each	0	\$0
Chloride(EPA 9250)	\$25.00	each	0	\$0
pH (EPA 9045)	\$8.00	each	0	\$0
Nitrate (EPA 353.2)	\$20.00	each	0	\$0
Subtotal Team Laboratory				\$0
MISC. LABORATORY ANALYSIS				
Grain Size Dist	\$120.00	each	0	\$0
TCLP	\$1,500.00	each	0	\$0
Moisture Content	\$15.00	each	0	\$0
Bulk Density	\$35.00	each	0	\$0
Chromium (Level II)	\$30.00	each	0	\$0
Total Suspended Solids	\$20.00	each	0	\$0
Total Dissolved Solids	\$20.00	each	0	\$0
Ammonia	\$25.00	each	0	\$0
Phosphate	\$25.00	each	0	\$0
Cation Exchange Capacity	\$100.00	each	0	\$0

Client:	U.S. Army Corps of Engineers	Printed:	22-Mar-96	Parsons Engineering Science, Inc.
	Huntsville Division			
Project:	Seneca Army Depot Activity, Romulus New York		Task # 9	
	RI/FS at the Radiological Disposal Areas		Treatability Study	
	SEAD-12		Requirements Assessment	
	Annex E			
Prop No:	979002-00001			

	Unit			
	Cost	Units	Quantity	Cost
Notes				
RADIOLOGICAL LABORATORY ANALYSIS				
Water Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gross Alpha&Beta	\$45.00	each	0	\$0
Soil Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gamma Spectrometry	\$0.00	each	0	\$0
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0
Sample Prep/Return	\$0.00	each	0	\$0
Wipe Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gross Alpha&Beta	\$45.00	each	0	\$0
AIR SAMPLES LABORATORY ANALYSIS				
SVOC's	\$490.00	each	0	\$0
Metals	\$150.00	each	0	\$0
Radon (Alpha Film)	\$25.00	each	0	\$0
Subtotal Misc. Laboratory				\$0
INVESTIGATION SUBCONTRACTORS				
Driller	Lump Sum	each	0	\$0
Photogrammetry	Lump Sum	each	0	\$0
IDW Disposal	Lump Sum	each	0	\$0
Surveyor	Lump Sum	each	0	\$0
Subtotal Investigation Subcontractors				\$0
Subtotal Laboratory & Investigation Subcontractors:				\$0
3% Mark-up:				\$0
SUBTOTAL SUBCONTRACTORS:				\$0
=====				
TASK TOTAL:				\$10,597

Client:	U.S. Army Corps of Engineers Huntsville Division	Printed:	22-Mar-96	Parsons Engineering Science, Inc.
Project:	Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas SEAD-12 Annex E			Task # 10 Feasibility Study
Prop No:	979002-00001			

	<u>Unit</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
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LABOR COSTS

ENGINEERS AND SCIENTISTS

Professional Level 6, Step 2 (P68)	\$58.74 /hour	0	\$0
Professional Level 6, Step 1 (P62)	\$46.47 /hour	0	\$0
Professional Level 5, Step 4 (P58)	\$44.11 /hour	40	\$1,764
Professional Level 5, Step 3 (P56)	\$37.99 /hour	0	\$0
Professional Level 5, Step 2 (P54)	\$32.91 /hour	100	\$3,291
Professional Level 5, Step 1 (P52)	\$29.39 /hour	0	\$0
Professional Level 4, Step 2 (P48)	\$29.13 /hour	200	\$5,826
Professional Level 4, Step 1 (P42)	\$25.20 /hour	0	\$0
Professional Level 3, Step 1 (P35)	\$24.04 /hour	0	\$0
Professional Level 2, Step 2 (P28)	\$23.09 /hour	0	\$0
Professional Level 2, Step 1 (P22)	\$19.89 /hour	0	\$0
Professional Level 1, Step 2 (P18)	\$18.57 /hour	200	\$3,714
Professional Level 1, Step 1 (P12)	\$14.84 /hour	0	\$0

TECHNICAL AND SUPPORT SPECIALISTS

Technician Level 5 (T55)	\$21.10 /hour	100	\$2,110
Technician Level 4, Step 2 (T48)	\$16.58 /hour	0	\$0
Technician Level 4, Step 1 (T42)	\$14.08 /hour	0	\$0
Technician Level 3, Step 2 (T38)	\$13.99 /hour	0	\$0
Technician Level 3, Step 1 (T32)	\$11.61 /hour	0	\$0
Technician Level 2 (T25)	\$10.13 /hour	0	\$0
Technician Level 1 (T15)	\$8.89 /hour	0	\$0
Support Level 3 (S35)	\$20.61 /hour	0	\$0
Support Level 2 (S25)	\$12.40 /hour	60	\$744
Support Level 1 (S15)	\$8.72 /hour	0	\$0

TOTAL HOURS/LABOR COST		700	\$17,449
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Contract Year: 1
Base Yr

Overhead Rate: 143%	Labor Burden:	\$24,953
SUBTOTAL BURDENED LABOR:		\$42,402

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 10
Feasibility Study

Prop No: 979002-00001

	<u>Unit</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00 /roll		0	\$0	
40 mL VOA Vials	\$122.74 /case		0	\$0	
1 Liter Amber Bottles	\$37.95 /case		0	\$0	
32 oz. HDPE Bottles	\$30.75 /case		0	\$0	
Braided Nylon Rope	\$0.15 /foot		0	\$0	
Bubble Pack	\$84.00 /roll		0	\$0	
Decon Eqt	\$18.00 /kit		0	\$0	
55g drums fill/mov	\$100.00 each		0	\$0	
Field Notebook	\$14.00 each		0	\$0	
Ice	\$1.00 /bag		0	\$0	
Latex Gloves	\$10.00 /box		0	\$0	
Methanol (Optima)	\$25.00 /bottle		0	\$0	
Hexane (Optima)	\$25.00 /bottle		0	\$0	
Acetone (Optima)	\$50.00 /bottle		0	\$0	
HCl (Optima)	\$285.00 /bottle		0	\$0	
HNO3 (Optima)	\$175.00 /bottle		0	\$0	
Ascorbic Acid	\$10.00 /bottle		0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00 /box		0	\$0	
Overboots	\$4.00 /pair		0	\$0	
Respirator Cartridges	\$15.00 /pair		0	\$0	
Packing Tape (doz)	\$72.00 /case		0	\$0	
Padlocks	\$12.00 each		0	\$0	
Sampling Tables	\$40.00 each		0	\$0	
Radiological Badges	\$20.00 each		0	\$0	
Aluminum Foil	\$1.00 /roll		0	\$0	
Stain Stl bwl/spn	\$30.00 /set		0	\$0	
Survey Stake/Flag	\$20.00 /bundle		0	\$0	
Teflon tape	\$8.00 /roll		0	\$0	
Tyveks	\$6.30 each		0	\$0	
Water (HPLC Grade)	\$97.00 /case		0	\$0	
Ziplock bags	\$3.00 /box		0	\$0	
Calibration Gas	\$450.00 /tank		0	\$0	
Ultra Pure Air	\$310.00 /ton		0	\$0	
Teflon Tubing	\$120.00 /roll		0	\$0	
Teflon Sheeting	\$500.00 /roll		0	\$0	
Folding Live Traps	\$15.00 each		0	\$0	
Glassware	\$25.00 each		0	\$0	
Quartz Filters	\$10.00 each		0	\$0	
Vermiculite Packing	\$16.00 /bag		0	\$0	
SUBTOTAL MATLS & SUPPLIES:				\$0	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 10
Feasibility Study

Prop No: 979002-00001

	<u>Unit</u>			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
<u>Notes</u>				
TRAVEL				
Airfare Boston\Syracuse	\$500.00	/trip	0	\$0
Airfare Boston\Huntsville	\$900.00	/trip	0	\$0
Subsistence-Seneca	\$96.00	/day	0	\$0
Subsistence-Huntsville	\$89.00	/day	0	\$0
Parking,Airport	\$13.00	/day	0	\$0
Auto Rental	\$55.00	/day	0	\$0
Suburban\Van rental	\$585.00	/week	0	\$0
Mileage	\$0.31	/mile	0	\$0
SUBTOTAL TRAVEL:				\$0
OTHERS				
IN-HOUSE SERVICES				
Telephone	\$4.00	/call	50	\$200
Word Proc/PC	\$3.70	/hour	60	\$222
CADD	\$5.00	/hour	80	\$400
Facsimile	\$1.00	/page	50	\$50
Overnight Express				
Letter/2 lb pack	\$14.50	each	0	\$0
Package (50 lbs)	\$96.25	each	0	\$0
Mail 4-lb pack	\$4.10	/pack	0	\$0
Mail letters	\$0.54	/letter	0	\$0
Subtotal Services				\$872
REPRODUCTION				
Photocopier	\$0.05	/page	2000	\$100
Aerial Photo repro	\$10.00	/photo	0	\$0
Blueline repro	\$1.00	/Sheet	500	\$500
Cronoflex Prod	\$5.50	/Sq Ft	0	\$0
3-ring binders	\$15.00	each	0	\$0
Color Copies	\$2.00	/page	0	\$0
Subtotal Reproduction				\$600

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 10
Feasibility Study

Prop No: 979002-00001

	Unit			
	Cost	Units	Quantity	Cost
Notes				
EQUIPMENT RENTAL				
EARTH SCIENCES EQUIPMENT				
Bailer	\$55.00 /week		0	\$0
Magnetometer	\$42.00 /week		0	\$0
pH/Cond meter	\$50.00 /week		0	\$0
Flow thru pH/Cond meter	\$257.00 /week		0	\$0
DO meter	\$55.00 /week		0	\$0
Soil Gas Supplies	\$50.00 /day		0	\$0
Slug test eqt	\$50.00 /week		0	\$0
Water level ind	\$40.00 /week		0	\$0
Turbidimeter	\$30.00 /week		0	\$0
Data Logger, Trnsdcr	\$135.00 /day		0	\$0
Flow Meter	\$30.00 /week		0	\$0
Water coolers	\$40.00 /month		0	\$0
Equipment Trailer	\$1,000.00 /month		0	\$0
Grundfus Redi Flow Pump	\$64.00 /day		0	\$0
PUF Sampler	\$150.00 /week		0	\$0
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0
Hi- Vol Sampler	\$75.00 /week		0	\$0
Hi- Vol Sampler Calibration Kit	\$25.00 /day		0	\$0
Ponar Sediment Sampler	\$27.00 /day		0	\$0
3.2 kw Generator	\$50.00 /day		0	\$0
Seismograph	\$200.00 /day		0	\$0
EM-31	\$85.00 /day		0	\$0
GPR	\$500.00 /day		0	\$0
Subtotal Rental				\$0
HEALTH & SAFETY EQUIPMENT				
HNu Meter	\$50.00 /day		0	\$0
Alpha Survey Meter	\$80.00 /week		0	\$0
Alpha Scintillation Counter	\$100.00 /week		0	\$0
Beta Sample Counter	\$100.00 /week		0	\$0
Gas Proportional Detector	\$100.00 /week		0	\$0
Gas Prop. Detector-Floor	\$100.00 /week		0	\$0
Radon Monitor	\$300.00 /week		0	\$0
Gamma Radiation Meter	\$50.00 /day		0	\$0
Calib Gas	\$10.00 /day		0	\$0
2-way radios	\$15.00 /ea/wk		0	\$0
Air Purif Resp	\$20.00 /week		0	\$0
10-Gal Eye Wash	\$35.00 /week		0	\$0
Combination SCBA/SAR	\$150.00 /day		0	\$0
Subtotal H & S				\$0

SUBTOTAL OTHERS: \$1,472

SUBTOTAL LABOR & ODC'S: \$43,874

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 10
Feasibility Study

Prop No: 979002-00001

	Unit				
	Cost	Units	Quantity	Cost	Notes

SUBCONTRACTORS

GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Iron(Ferrous)	\$30.00 each	0	\$0
Sulfide	\$30.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (EPA 9060)	\$25.00 each	0	\$0
TOX (EPA 9056)	\$50.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
BOD	\$60.00 each	0	\$0
Sulfate(EPA 300)	\$25.00 each	0	\$0
COD	\$50.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Volatiles (EPA 524)	\$195.00 each	0	\$0
Hardness(EPA 130.2)	\$15.00 each	0	\$0
Alkalinity(EPA 310)	\$12.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (L. Kahn)	\$60.00 each	0	\$0
TOX (EPA 9056)	\$70.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

Subtotal Team Laboratory			\$0
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MISC. LABORATORY ANALYSIS

Grain Size Dist	\$120.00 each	0	\$0
TCLP	\$1,500.00 each	0	\$0
Moisture Content	\$15.00 each	0	\$0
Bulk Density	\$35.00 each	0	\$0
Chromium (Level II)	\$30.00 each	0	\$0
Total Suspended Solids	\$20.00 each	0	\$0
Total Dissolved Solids	\$20.00 each	0	\$0
Ammonia	\$25.00 each	0	\$0
Phosphate	\$25.00 each	0	\$0
Cation Exchange Capacity	\$100.00 each	0	\$0

Client:	U.S. Army Corps of Engineers	Printed:	22-Mar-96	Parsons Engineering Science, Inc.
	Huntsville Division			
Project:	Seneca Army Depot Activity, Romulus New York			Task # 10
	RI/FS at the Radiological Disposal Areas			Feasibility Study
	SEAD-12			
	Annex E			
Prop No:	979002-00001			

	Unit Cost	Units	Quantity	Cost	Notes
RADIOLOGICAL LABORATORY ANALYSIS					
Water Samples For:					
Thorium 232, 230, 227	\$60.00 each		0	\$0	
Uranium 238, 235, 233+234	\$60.00 each		0	\$0	
Radium 226,223	\$40.00 each		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00 each		0	\$0	
Plutonium 239 + 240	\$65.00 each		0	\$0	
Americium 241	\$65.00 each		0	\$0	
Gross Alpha&Beta	\$45.00 each		0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00 each		0	\$0	
Uranium 238, 235, 233+234	\$60.00 each		0	\$0	
Radium 226,223	\$40.00 each		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00 each		0	\$0	
Plutonium 239 + 240	\$65.00 each		0	\$0	
Americium 241	\$65.00 each		0	\$0	
Gamma Spectrometry	\$0.00 each		0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00 each		0	\$0	
Sample Prep/Return	\$0.00 each		0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00 each		0	\$0	
Uranium 238, 235, 233+234	\$60.00 each		0	\$0	
Radium 226,223	\$40.00 each		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00 each		0	\$0	
Plutonium 239 + 240	\$65.00 each		0	\$0	
Americium 241	\$65.00 each		0	\$0	
Gross Alpha&Beta	\$45.00 each		0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00 each		0	\$0	
Metals	\$150.00 each		0	\$0	
Radon (Alpha Film)	\$25.00 each		0	\$0	
Subtotal Misc. Laboratory				\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum each		0	\$0	
Photogrammetry	Lump Sum each		0	\$0	
IDW Disposal	Lump Sum each		0	\$0	
Surveyor	Lump Sum each		0	\$0	
Subtotal Investigation Subcontractors				\$0	
Subtotal Laboratory & Investigation Subcontractors:				\$0	
3% Mark-up:				\$0	
SUBTOTAL SUBCONTRACTORS:				\$0	
TASK TOTAL:				\$43,874	

Client:	U.S. Army Corps of Engineers Huntsville Division	Printed:	22-Mar-96	Parsons Engineering Science, Inc.
Project:	Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas SEAD-12 Annex E			Task # 11 FS Report Pre-Draft,Draft, Draft-Final,Final
Prop No:	979002-00001			

	Unit Cost	Units	Quantity	Cost	Notes
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74 /hour		0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47 /hour		0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11 /hour		60	\$2,647	
Professional Level 5, Step 3 (P56)	\$37.99 /hour		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91 /hour		100	\$3,291	
Professional Level 5, Step 1 (P52)	\$29.39 /hour		0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13 /hour		160	\$4,661	
Professional Level 4, Step 1 (P42)	\$25.20 /hour		0	\$0	
Professional Level 3, Step 1 (P35)	\$24.04 /hour		0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09 /hour		0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89 /hour		0	\$0	
Professional Level 1, Step 2 (P18)	\$18.57 /hour		160	\$2,971	
Professional Level 1, Step 1 (P12)	\$14.84 /hour		0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10 /hour		100	\$2,110	
Technician Level 4, Step 2 (T48)	\$16.58 /hour		0	\$0	
Technician Level 4, Step 1 (T42)	\$14.08 /hour		0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99 /hour		0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61 /hour		0	\$0	
Technician Level 2 (T25)	\$10.13 /hour		0	\$0	
Technician Level 1 (T15)	\$8.89 /hour		0	\$0	
Support Level 3 (S35)	\$20.61 /hour		0	\$0	
Support Level 2 (S25)	\$12.40 /hour		120	\$1,488	
Support Level 1 (S15)	\$8.72 /hour		0	\$0	
TOTAL HOURS/LABOR COST			700	\$17,168	
Contract Year:	1				
Base Yr					
Overhead Rate:	143%				
		Labor Burden:		\$24,550	
		SUBTOTAL BURDENED LABOR:		\$41,717	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 11
FS Report
Pre-Draft,Draft,
Draft-Final,Final

Prop No: 979002-00001

	Unit			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
MATERIALS AND SUPPLIES				
Bottle labels	\$20.00	/roll	0	\$0
40 mL VOA Vials	\$122.74	/case	0	\$0
1 Liter Amber Bottles	\$37.95	/case	0	\$0
32 oz. HDPE Bottles	\$30.75	/case	0	\$0
Braided Nylon Rope	\$0.15	/foot	0	\$0
Bubble Pack	\$84.00	/roll	0	\$0
Decon Eqt	\$18.00	/kit	0	\$0
55g drums fill/mov	\$100.00	each	0	\$0
Field Notebook	\$14.00	each	0	\$0
Ice	\$1.00	/bag	0	\$0
Latex Gloves	\$10.00	/box	0	\$0
Methanol (Optima)	\$25.00	/bottle	0	\$0
Hexane (Optima)	\$25.00	/bottle	0	\$0
Acetone (Optima)	\$50.00	/bottle	0	\$0
HCl (Optima)	\$285.00	/bottle	0	\$0
HNO3 (Optima)	\$175.00	/bottle	0	\$0
Ascorbic Acid	\$10.00	/bottle	0	\$0
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0
Overboots	\$4.00	/pair	0	\$0
Respirator Cartridges	\$15.00	/pair	0	\$0
Packing Tape (doz)	\$72.00	/case	0	\$0
Padlocks	\$12.00	each	0	\$0
Sampling Tables	\$40.00	each	0	\$0
Radiological Badges	\$20.00	each	0	\$0
Aluminum Foil	\$1.00	/roll	0	\$0
Stain Stl bwl/spn	\$30.00	/set	0	\$0
Survey Stake/Flag	\$20.00	/bundle	0	\$0
Teflon tape	\$8.00	/roll	0	\$0
Tyveks	\$6.30	each	0	\$0
Water (HPLC Grade)	\$97.00	/case	0	\$0
Ziplock bags	\$3.00	/box	0	\$0
Calibration Gas	\$450.00	/tank	0	\$0
Ultra Pure Air	\$310.00	/ton	0	\$0
Teflon Tubing	\$120.00	/roll	0	\$0
Teflon Sheeting	\$500.00	/roll	0	\$0
Folding Live Traps	\$15.00	each	0	\$0
Glassware	\$25.00	each	0	\$0
Quartz Filters	\$10.00	each	0	\$0
Vermiculite Packing	\$16.00	/bag	0	\$0
SUBTOTAL MATLS & SUPPLIES:				\$0

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 11
FS Report
Pre-Draft,Draft,
Draft-Final,Final

Prop No: 979002-00001

	<u>Unit</u>			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
				<u>Notes</u>
TRAVEL				
Airfare Boston\Syracuse	\$500.00	/trip	0	\$0
Airfare Boston\Huntsville	\$900.00	/trip	0	\$0
Subsistence-Seneca	\$96.00	/day	0	\$0
Subsistence-Huntsville	\$89.00	/day	0	\$0
Parking,Airport	\$13.00	/day	0	\$0
Auto Rental	\$55.00	/day	0	\$0
Suburban\Van rental	\$585.00	/week	0	\$0
Mileage	\$0.31	/mile	0	\$0

SUBTOTAL TRAVEL: \$0

OTHERS

IN-HOUSE SERVICES

Telephone	\$4.00	/call	100	\$400
Word Proc/PC	\$3.70	/hour	100	\$370
CADD	\$5.00	/hour	80	\$400
Facsimile	\$1.00	/page	100	\$100
Overnight Express				
Letter/2 lb pack	\$14.50	each	0	\$0
Package (50 lbs)	\$96.25	each	85	\$8,181
Mail 4-lb pack	\$4.10	/pack	0	\$0
Mail letters	\$0.54	/letter	0	\$0

Subtotal Services \$9,451

REPRODUCTION

Photocopier	\$0.05	/page	157000	\$7,850
Aerial Photo repro	\$10.00	/photo	0	\$0
Blueline repro	\$1.00	/Sheet	3140	\$3,140
Cronoflex Prod	\$5.50	/Sq Ft	0	\$0
3-ring binders	\$15.00	each	500	\$7,500
Color Copies	\$2.00	/page	1570	\$3,140

Subtotal Reproduction \$21,630

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 11
FS Report
Pre-Draft,Draft,
Draft-Final,Final

Prop No: 979002-00001

	Unit			
	Cost	Units	Quantity	Cost
Notes				
EQUIPMENT RENTAL				
EARTH SCIENCES EQUIPMENT				
Bailer	\$55.00 /week		0	\$0
Magnetometer	\$42.00 /week		0	\$0
pH/Cond meter	\$50.00 /week		0	\$0
Flow thru pH/Cond meter	\$257.00 /week		0	\$0
DO meter	\$55.00 /week		0	\$0
Soil Gas Supplies	\$50.00 /day		0	\$0
Slug test eqt	\$50.00 /week		0	\$0
Water level ind	\$40.00 /week		0	\$0
Turbidimeter	\$30.00 /week		0	\$0
Data Logger,Trnsdcr	\$135.00 /day		0	\$0
Flow Meter	\$30.00 /week		0	\$0
Water coolers	\$40.00 /month		0	\$0
Equipment Trailer	\$1,000.00 /month		0	\$0
Grundfus Redi Flow Pump	\$64.00 /day		0	\$0
PUF Sampler	\$150.00 /week		0	\$0
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0
Hi- Vol Sampler	\$75.00 /week		0	\$0
Hi- Vol Sampler Calibration Kit	\$25.00 /day		0	\$0
Ponar Sediment Sampler	\$27.00 /day		0	\$0
3.2 kw Generator	\$50.00 /day		0	\$0
Seismograph	\$200.00 /day		0	\$0
EM-31	\$85.00 /day		0	\$0
GPR	\$500.00 /day		0	\$0
Subtotal Rental				\$0
HEALTH & SAFETY EQUIPMENT				
HNu Meter	\$50.00 /day		0	\$0
Alpha Survey Meter	\$80.00 /week		0	\$0
Alpha Scintillation Counter	\$100.00 /week		0	\$0
Beta Sample Counter	\$100.00 /week		0	\$0
Gas Proportional Detector	\$100.00 /week		0	\$0
Gas Prop. Detector-Floor	\$100.00 /week		0	\$0
Radon Monitor	\$300.00 /week		0	\$0
Gamma Radiation Meter	\$50.00 /day		0	\$0
Calib Gas	\$10.00 /day		0	\$0
2-way radios	\$15.00 /ea/wk		0	\$0
Air Purif Resp	\$20.00 /week		0	\$0
10-Gal Eye Wash	\$35.00 /week		0	\$0
Combination SCBA/SAR	\$150.00 /day		0	\$0
Subtotal H & S				\$0

SUBTOTAL OTHERS: \$31,081

SUBTOTAL LABOR & ODC'S: \$72,799

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 11
FS Report
Pre-Draft,Draft,
Draft-Final,Final

Prop No: 979002-00001

	Unit				
	Cost	Units	Quantity	Cost	Notes

SUBCONTRACTORS

GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Iron(Ferrous)	\$30.00 each	0	\$0
Sulfide	\$30.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (EPA 9060)	\$25.00 each	0	\$0
TOX (EPA 9056)	\$50.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
BOD	\$60.00 each	0	\$0
Sulfate(EPA 300)	\$25.00 each	0	\$0
COD	\$50.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Volatiles (EPA 524)	\$195.00 each	0	\$0
Hardness(EPA 130.2)	\$15.00 each	0	\$0
Alkalinity(EPA 310)	\$12.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (L. Kahn)	\$60.00 each	0	\$0
TOX (EPA 9056)	\$70.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

Subtotal Team Laboratory	\$0
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MISC. LABORATORY ANALYSIS

Grain Size Dist	\$120.00 each	0	\$0
TCLP	\$1,500.00 each	0	\$0
Moisture Content	\$15.00 each	0	\$0
Bulk Density	\$35.00 each	0	\$0
Chromium (Level II)	\$30.00 each	0	\$0
Total Suspended Solids	\$20.00 each	0	\$0
Total Dissolved Solids	\$20.00 each	0	\$0
Ammonia	\$25.00 each	0	\$0
Phosphate	\$25.00 each	0	\$0
Cation Exchange Capacity	\$100.00 each	0	\$0

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 11
FS Report
Pre-Draft,Draft,
Draft-Final,Final

Prop No: 979002-00001

	<u>Unit</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
RADIOLOGICAL LABORATORY ANALYSIS					
Water Samples For:					
Thorium 232, 230, 227	\$60.00 each		0	\$0	
Uranium 238, 235, 233+234	\$60.00 each		0	\$0	
Radium 226,223	\$40.00 each		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00 each		0	\$0	
Plutonium 239 + 240	\$65.00 each		0	\$0	
Americium 241	\$65.00 each		0	\$0	
Gross Alpha&Beta	\$45.00 each		0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00 each		0	\$0	
Uranium 238, 235, 233+234	\$60.00 each		0	\$0	
Radium 226,223	\$40.00 each		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00 each		0	\$0	
Plutonium 239 + 240	\$65.00 each		0	\$0	
Americium 241	\$65.00 each		0	\$0	
Gamma Spectrometry	\$0.00 each		0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00 each		0	\$0	
Sample Prep/Return	\$0.00 each		0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00 each		0	\$0	
Uranium 238, 235, 233+234	\$60.00 each		0	\$0	
Radium 226,223	\$40.00 each		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00 each		0	\$0	
Plutonium 239 + 240	\$65.00 each		0	\$0	
Americium 241	\$65.00 each		0	\$0	
Gross Alpha&Beta	\$45.00 each		0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00 each		0	\$0	
Metals	\$150.00 each		0	\$0	
Radon (Alpha Film)	\$25.00 each		0	\$0	
Subtotal Misc. Laboratory				\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum each		0	\$0	
Photogrammetry	Lump Sum each		0	\$0	
IDW Disposal	Lump Sum each		0	\$0	
Surveyor	Lump Sum each		0	\$0	
Subtotal Investigation Subcontractors				\$0	
Subtotal Laboratory & Investigation Subcontractors:				\$0	
3% Mark-up:				\$0	
SUBTOTAL SUBCONTRACTORS:				\$0	
TASK TOTAL:				\$72,799	

Client:	U.S. Army Corps of Engineers Huntsville Division	Printed:	22-Mar-96	Parsons Engineering Science, Inc.
Project:	Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas SEAD-12 Annex E			Task # 12 Post FS Support
Prop No:	979002-00001			

	Unit Cost	Units	Quantity	Cost	Notes
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74 /hour		0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47 /hour		0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11 /hour		180	\$7,940	
Professional Level 5, Step 3 (P56)	\$37.99 /hour		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91 /hour		180	\$5,924	
Professional Level 5, Step 1 (P52)	\$29.39 /hour		0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13 /hour		80	\$2,330	
Professional Level 4, Step 1 (P42)	\$25.20 /hour		0	\$0	
Professional Level 3, Step 1 (P35)	\$24.04 /hour		0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09 /hour		0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89 /hour		0	\$0	
Professional Level 1, Step 2 (P18)	\$18.57 /hour		80	\$1,486	
Professional Level 1, Step 1 (P12)	\$14.84 /hour		0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10 /hour		0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58 /hour		0	\$0	
Technician Level 4, Step 1 (T42)	\$14.08 /hour		0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99 /hour		0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61 /hour		0	\$0	
Technician Level 2 (T25)	\$10.13 /hour		0	\$0	
Technician Level 1 (T15)	\$8.89 /hour		0	\$0	
Support Level 3 (S35)	\$20.61 /hour		0	\$0	
Support Level 2 (S25)	\$12.40 /hour		80	\$992	
Support Level 1 (S15)	\$8.72 /hour		0	\$0	
TOTAL HOURS/LABOR COST			600	\$18,672	
Contract Year:	1				
Base Yr					
Overhead Rate:	143%				
		Labor Burden:		\$26,700	
		SUBTOTAL BURDENED LABOR:		\$45,372	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 12
Post FS Support

Prop No: 979002-00001

	<u>Unit</u>	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
MATERIALS AND SUPPLIES						
Bottle labels	\$20.00 /roll			0	\$0	
40 mL VOA Vials	\$122.74 /case			0	\$0	
1 Liter Amber Bottles	\$37.95 /case			0	\$0	
32 oz. HDPE Bottles	\$30.75 /case			0	\$0	
Braided Nylon Rope	\$0.15 /foot			0	\$0	
Bubble Pack	\$84.00 /roll			0	\$0	
Decon Eqt	\$18.00 /kit			0	\$0	
55g drums fill/mov	\$100.00 each			0	\$0	
Field Notebook	\$14.00 each			0	\$0	
Ice	\$1.00 /bag			0	\$0	
Latex Gloves	\$10.00 /box			0	\$0	
Methanol (Optima)	\$25.00 /bottle			0	\$0	
Hexane (Optima)	\$25.00 /bottle			0	\$0	
Acetone (Optima)	\$50.00 /bottle			0	\$0	
HCl (Optima)	\$285.00 /bottle			0	\$0	
HNO3 (Optima)	\$175.00 /bottle			0	\$0	
Ascorbic Acid	\$10.00 /bottle			0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00 /box			0	\$0	
Overboots	\$4.00 /pair			0	\$0	
Respirator Cartridges	\$15.00 /pair			0	\$0	
Packing Tape (doz)	\$72.00 /case			0	\$0	
Padlocks	\$12.00 each			0	\$0	
Sampling Tables	\$40.00 each			0	\$0	
Radiological Badges	\$20.00 each			0	\$0	
Aluminum Foil	\$1.00 /roll			0	\$0	
Stain Stl bwl/spn	\$30.00 /set			0	\$0	
Survey Stake/Flag	\$20.00 /bundle			0	\$0	
Teflon tape	\$8.00 /roll			0	\$0	
Tyveks	\$6.30 each			0	\$0	
Water (HPLC Grade)	\$97.00 /case			0	\$0	
Ziplock bags	\$3.00 /box			0	\$0	
Calibration Gas	\$450.00 /tank			0	\$0	
Ultra Pure Air	\$310.00 /ton			0	\$0	
Teflon Tubing	\$120.00 /roll			0	\$0	
Teflon Sheeting	\$500.00 /roll			0	\$0	
Folding Live Traps	\$15.00 each			0	\$0	
Glassware	\$25.00 each			0	\$0	
Quartz Filters	\$10.00 each			0	\$0	
Vermiculite Packing	\$16.00 /bag			0	\$0	
SUBTOTAL MATLS & SUPPLIES:					\$0	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 12
Post FS Support

Prop No: 979002-00001

	Unit			
	Cost	Units	Quantity	Cost
Notes				
TRAVEL				
Airfare Boston\Syracuse	\$500.00 /trip		8	\$4,000
Airfare Boston\Huntsville	\$900.00 /trip		0	\$0
Subsistence-Seneca	\$96.00 /day		8	\$768
Subsistence-Huntsville	\$89.00 /day		0	\$0
Parking,Airport	\$13.00 /day		8	\$104
Auto Rental	\$55.00 /day		4	\$220
Suburban\Van rental	\$585.00 /week		0	\$0
Mileage	\$0.31 /mile		100	\$31
SUBTOTAL TRAVEL:				\$5,123
OTHERS				
IN-HOUSE SERVICES				
Telephone	\$4.00 /call		50	\$200
Word Proc/PC	\$3.70 /hour		120	\$444
CADD	\$5.00 /hour		0	\$0
Facsimile	\$1.00 /page		100	\$100
Overnight Express				
Letter/2 lb pack	\$14.50 each		50	\$725
Package (50 lbs)	\$96.25 each		0	\$0
Mail 4-lb pack	\$4.10 /pack		0	\$0
Mail letters	\$0.54 /letter		0	\$0
Subtotal Services				\$1,469
REPRODUCTION				
Photocopier	\$0.05 /page		100000	\$5,000
Aerial Photo repro	\$10.00 /photo		0	\$0
Blueline repro	\$1.00 /Sheet		0	\$0
Cronoflex Prod	\$5.50 /Sq Ft		0	\$0
3-ring binders	\$15.00 each		157	\$2,355
Color Copies	\$2.00 /page		0	\$0
Subtotal Reproduction				\$7,355

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 12
Post FS Support

Prop No: 979002-00001

	Unit			
	Cost	Units	Quantity	Cost
EQUIPMENT RENTAL				
EARTH SCIENCES EQUIPMENT				
Bailer	\$55.00 /week		0	\$0
Magnetometer	\$42.00 /week		0	\$0
pH/Cond meter	\$50.00 /week		0	\$0
Flow thru pH/Cond meter	\$257.00 /week		0	\$0
DO meter	\$55.00 /week		0	\$0
Soil Gas Supplies	\$50.00 /day		0	\$0
Slug test eqt	\$50.00 /week		0	\$0
Water level ind	\$40.00 /week		0	\$0
Turbidimeter	\$30.00 /week		0	\$0
Data Logger, Trnsdcr	\$135.00 /day		0	\$0
Flow Meter	\$30.00 /week		0	\$0
Water coolers	\$40.00 /month		0	\$0
Equipment Trailer	\$1,000.00 /month		0	\$0
Grundfos Redi Flow Pump	\$64.00 /day		0	\$0
PUF Sampler	\$150.00 /week		0	\$0
PUF Sampler Calibration Kit	\$25.00 /day		0	\$0
Hi- Vol Sampler	\$75.00 /week		0	\$0
Hi- Vol Sampler Calibration Kit	\$25.00 /day		0	\$0
Ponar Sediment Sampler	\$27.00 /day		0	\$0
3.2 kw Generator	\$50.00 /day		0	\$0
Seismograph	\$200.00 /day		0	\$0
EM-31	\$85.00 /day		0	\$0
GPR	\$500.00 /day		0	\$0
Subtotal Rental				\$0

HEALTH & SAFETY EQUIPMENT

HNu Meter	\$50.00 /day	0	\$0
Alpha Survey Meter	\$80.00 /week	0	\$0
Alpha Scintillation Counter	\$100.00 /week	0	\$0
Beta Sample Counter	\$100.00 /week	0	\$0
Gas Proportional Detector	\$100.00 /week	0	\$0
Gas Prop. Detector-Floor	\$100.00 /week	0	\$0
Radon Monitor	\$300.00 /week	0	\$0
Gamma Radiation Meter	\$50.00 /day	0	\$0
Calib Gas	\$10.00 /day	0	\$0
2-way radios	\$15.00 /ea/wk	0	\$0
Air Purif Resp	\$20.00 /week	0	\$0
10-Gal Eye Wash	\$35.00 /week	0	\$0
Combination SCBA/SAR	\$150.00 /day	0	\$0

Subtotal H & S \$0

SUBTOTAL OTHERS: \$8,824

SUBTOTAL LABOR & ODC'S: \$59,319

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 12
Post FS Support

Prop No: 979002-00001

	<u>Unit</u> <u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
SUBCONTRACTORS					
GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS					
Volatiles (TCL)	\$180.00 each		0	\$0	
B/N/A (TCL)	\$400.00 each		0	\$0	
Pest./PCBs (TCL)	\$180.00 each		0	\$0	
Total Metals & CN(TAL)	\$170.00 each		0	\$0	
Iron(Ferrous)	\$30.00 each		0	\$0	
Sulfide	\$30.00 each		0	\$0	
Spec Cond(EPA 9050)	\$8.00 each		0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00 each		0	\$0	
TOX (EPA 9056)	\$50.00 each		0	\$0	
Chloride(EPA 9250)	\$25.00 each		0	\$0	
BOD	\$60.00 each		0	\$0	
Sulfate(EPA 300)	\$25.00 each		0	\$0	
COD	\$50.00 each		0	\$0	
pH (EPA 9045)	\$8.00 each		0	\$0	
Volatiles (EPA 524)	\$195.00 each		0	\$0	
Hardness(EPA 130.2)	\$15.00 each		0	\$0	
Alkalinity(EPA 310)	\$12.00 each		0	\$0	
Nitrate (EPA 353.2)	\$20.00 each		0	\$0	
SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS					
Volatiles (TCL)	\$180.00 each		0	\$0	
B/N/A (TCL)	\$400.00 each		0	\$0	
Pest./PCBs (TCL)	\$180.00 each		0	\$0	
Total Metals & CN(TAL)	\$170.00 each		0	\$0	
Spec Cond(EPA 9050)	\$8.00 each		0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00 each		0	\$0	
TOX (EPA 9056)	\$70.00 each		0	\$0	
Chloride(EPA 9250)	\$25.00 each		0	\$0	
pH (EPA 9045)	\$8.00 each		0	\$0	
Nitrate (EPA 353.2)	\$20.00 each		0	\$0	
Subtotal Team Laboratory				\$0	
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00 each		0	\$0	
TCLP	\$1,500.00 each		0	\$0	
Moisture Content	\$15.00 each		0	\$0	
Bulk Density	\$35.00 each		0	\$0	
Chromium (Level II)	\$30.00 each		0	\$0	
Total Suspended Solids	\$20.00 each		0	\$0	
Total Dissolved Solids	\$20.00 each		0	\$0	
Ammonia	\$25.00 each		0	\$0	
Phosphate	\$25.00 each		0	\$0	
Cation Exchange Capacity	\$100.00 each		0	\$0	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 12
Post FS Support

Prop No: 979002-00001

	Unit			
	Cost	Units	Quantity	Cost
Notes				
RADIOLOGICAL LABORATORY ANALYSIS				
Water Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gross Alpha&Beta	\$45.00	each	0	\$0
Soil Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gamma Spectrometry	\$0.00	each	0	\$0
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0
Sample Prep/Return	\$0.00	each	0	\$0
Wipe Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gross Alpha&Beta	\$45.00	each	0	\$0
AIR SAMPLES LABORATORY ANALYSIS				
SVOC's	\$490.00	each	0	\$0
Metals	\$150.00	each	0	\$0
Radon (Alpha Film)	\$25.00	each	0	\$0
Subtotal Misc. Laboratory				\$0
INVESTIGATION SUBCONTRACTORS				
Driller	Lump Sum	each	0	\$0
Photogrammetry	Lump Sum	each	0	\$0
IDW Disposal	Lump Sum	each	0	\$0
Surveyor	Lump Sum	each	0	\$0
Subtotal Investigation Subcontractors				\$0
Subtotal Laboratory & Investigation Subcontractors:				\$0
3% Mark-up:				\$0
SUBTOTAL SUBCONTRACTORS:				\$0
=====				
TASK TOTAL:				\$59,319

Client:	U.S. Army Corps of Engineers Huntsville Division	Printed:	22-Mar-96	Parsons Engineering Science, Inc.
Project:	Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas SEAD-12 Annex E			Task # 13 Project Management 24 Monthly Reports
Prop No:	979002-00001			

	Unit Cost	Units	Quantity	Cost	Notes
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74 /hour		100	\$5,874	
Professional Level 6, Step 1 (P62)	\$46.47 /hour		0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11 /hour		288	\$12,704	
Professional Level 5, Step 3 (P56)	\$37.99 /hour		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91 /hour		144	\$4,739	
Professional Level 5, Step 1 (P52)	\$29.39 /hour		0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13 /hour		0	\$0	
Professional Level 4, Step 1 (P42)	\$25.20 /hour		0	\$0	
Professional Level 3, Step 1 (P35)	\$24.04 /hour		0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09 /hour		0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89 /hour		0	\$0	
Professional Level 1, Step 2 (P18)	\$18.57 /hour		0	\$0	
Professional Level 1, Step 1 (P12)	\$14.84 /hour		0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10 /hour		0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58 /hour		0	\$0	
Technician Level 4, Step 1 (T42)	\$14.08 /hour		0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99 /hour		0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61 /hour		0	\$0	
Technician Level 2 (T25)	\$10.13 /hour		0	\$0	
Technician Level 1 (T15)	\$8.89 /hour		0	\$0	
Support Level 3 (S35)	\$20.61 /hour		0	\$0	
Support Level 2 (S25)	\$12.40 /hour		48	\$595	
Support Level 1 (S15)	\$8.72 /hour		0	\$0	
TOTAL HOURS/LABOR COST			580	\$23,912	
Contract Year:	1				
Base Yr					
Overhead Rate:	143%				
		Labor Burden:		\$34,194	
		SUBTOTAL BURDENED LABOR:		\$58,106	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 13
Project Management
24 Monthly Reports

Prop No: 979002-00001

	<u>Unit</u>	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
MATERIALS AND SUPPLIES						
Bottle labels		\$20.00	/roll	0	\$0	
40 mL VOA Vials		\$122.74	/case	0	\$0	
1 Liter Amber Bottles		\$37.95	/case	0	\$0	
32 oz. HDPE Bottles		\$30.75	/case	0	\$0	
Braided Nylon Rope		\$0.15	/foot	0	\$0	
Bubble Pack		\$84.00	/roll	0	\$0	
Decon Eqt		\$18.00	/kit	0	\$0	
55g drums fill/mov		\$100.00	each	0	\$0	
Field Notebook		\$14.00	each	0	\$0	
Ice		\$1.00	/bag	0	\$0	
Latex Gloves		\$10.00	/box	0	\$0	
Methanol (Optima)		\$25.00	/bottle	0	\$0	
Hexane (Optima)		\$25.00	/bottle	0	\$0	
Acetone (Optima)		\$50.00	/bottle	0	\$0	
HCl (Optima)		\$285.00	/bottle	0	\$0	
HNO3 (Optima)		\$175.00	/bottle	0	\$0	
Ascorbic Acid		\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)		\$50.00	/box	0	\$0	
Overboots		\$4.00	/pair	0	\$0	
Respirator Cartridges		\$15.00	/pair	0	\$0	
Packing Tape (doz)		\$72.00	/case	0	\$0	
Padlocks		\$12.00	each	0	\$0	
Sampling Tables		\$40.00	each	0	\$0	
Radiological Badges		\$20.00	each	0	\$0	
Aluminum Foil		\$1.00	/roll	0	\$0	
Stain Stl bwl/spn		\$30.00	/set	0	\$0	
Survey Stake/Flag		\$20.00	/bundle	0	\$0	
Teflon tape		\$8.00	/roll	0	\$0	
Tyveks		\$6.30	each	0	\$0	
Water (HPLC Grade)		\$97.00	/case	0	\$0	
Ziplock bags		\$3.00	/box	0	\$0	
Calibration Gas		\$450.00	/tank	0	\$0	
Ultra Pure Air		\$310.00	/ton	0	\$0	
Teflon Tubing		\$120.00	/roll	0	\$0	
Teflon Sheeting		\$500.00	/roll	0	\$0	
Folding Live Traps		\$15.00	each	0	\$0	
Glassware		\$25.00	each	0	\$0	
Quartz Filters		\$10.00	each	0	\$0	
Vermiculite Packing		\$16.00	/bag	0	\$0	
SUBTOTAL MATLS & SUPPLIES:					\$0	

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 13
Project Management
24 Monthly Reports

Prop No: 979002-00001

	<u>Unit</u>			
	<u>Cost</u>	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>
<u>Notes</u>				
TRAVEL				
Airfare Boston\Syracuse	\$500.00 /trip		4	\$2,000
Airfare Boston\Huntsville	\$900.00 /trip		0	\$0
Subsistence-Seneca	\$96.00 /day		4	\$384
Subsistence-Huntsville	\$89.00 /day		0	\$0
Parking,Airport	\$13.00 /day		2	\$26
Auto Rental	\$55.00 /day		2	\$110
Suburban\Van rental	\$585.00 /week		0	\$0
Mileage	\$0.31 /mile		100	\$31
SUBTOTAL TRAVEL:				\$2,551
OTHERS				
IN-HOUSE SERVICES				
Telephone	\$4.00 /call		500	\$2,000
Word Proc/PC	\$3.70 /hour		48	\$178
CADD	\$5.00 /hour		0	\$0
Facsimile	\$1.00 /page		1000	\$1,000
Overnight Express				
Letter/2 lb pack	\$14.50 each		24	\$348
Package (50 lbs)	\$96.25 each		0	\$0
Mail 4-lb pack	\$4.10 /pack		0	\$0
Mail letters	\$0.54 /letter		0	\$0
Subtotal Services				\$3,526
REPRODUCTION				
Photocopier	\$0.05 /page		2400	\$120
Aerial Photo repro	\$10.00 /photo		0	\$0
Blueline repro	\$1.00 /Sheet		0	\$0
Cronoflex Prod	\$5.50 /Sq Ft		0	\$0
3-ring binders	\$15.00 each		0	\$0
Color Copies	\$2.00 /page		0	\$0
Subtotal Reproduction				\$120

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 13
Project Management
24 Monthly Reports

Prop No: 979002-00001

	<u>Unit</u>		<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
	<u>Cost</u>	<u>Units</u>			
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	/week	0	\$0	
Magnetometer	\$42.00	/week	0	\$0	
pH/Cond meter	\$50.00	/week	0	\$0	
Flow thru pH/Cond meter	\$257.00	/week	0	\$0	
DO meter	\$55.00	/week	0	\$0	
Soil Gas Supplies	\$50.00	/day	0	\$0	
Slug test eqt	\$50.00	/week	0	\$0	
Water level ind	\$40.00	/week	0	\$0	
Turbidimeter	\$30.00	/week	0	\$0	
Data Logger, Trnsdcr	\$135.00	/day	0	\$0	
Flow Meter	\$30.00	/week	0	\$0	
Water coolers	\$40.00	/month	0	\$0	
Equipment Trailer	\$1,000.00	/month	0	\$0	
Grundfus Redi Flow Pump	\$64.00	/day	0	\$0	
PUF Sampler	\$150.00	/week	0	\$0	
PUF Sampler Calibration Kit	\$25.00	/day	0	\$0	
Hi- Vol Sampler	\$75.00	/week	0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00	/day	0	\$0	
Ponar Sediment Sampler	\$27.00	/day	0	\$0	
3.2 kw Generator	\$50.00	/day	0	\$0	
Seismograph	\$200.00	/day	0	\$0	
EM-31	\$85.00	/day	0	\$0	
GPR	\$500.00	/day	0	\$0	
Subtotal Rental				\$0	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00	/day	0	\$0	
Alpha Survey Meter	\$80.00	/week	0	\$0	
Alpha Scintillation Counter	\$100.00	/week	0	\$0	
Beta Sample Counter	\$100.00	/week	0	\$0	
Gas Proportional Detector	\$100.00	/week	0	\$0	
Gas Prop. Detector-Floor	\$100.00	/week	0	\$0	
Radon Monitor	\$300.00	/week	0	\$0	
Gamma Radiation Meter	\$50.00	/day	0	\$0	
Calib Gas	\$10.00	/day	0	\$0	
2-way radios	\$15.00	/ea/wk	0	\$0	
Air Purif Resp	\$20.00	/week	0	\$0	
10-Gal Eye Wash	\$35.00	/week	0	\$0	
Combination SCBA/SAR	\$150.00	/day	0	\$0	
Subtotal H & S				\$0	

SUBTOTAL OTHERS: \$3,646

SUBTOTAL LABOR & ODC'S: \$64,303

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 13
Project Management
24 Monthly Reports

Prop No: 979002-00001

	Unit			
	Cost	Units	Quantity	Cost
				Notes

SUBCONTRACTORS

GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Iron(Ferrous)	\$30.00 each	0	\$0
Sulfide	\$30.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (EPA 9060)	\$25.00 each	0	\$0
TOX (EPA 9056)	\$50.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
BOD	\$60.00 each	0	\$0
Sulfate(EPA 300)	\$25.00 each	0	\$0
COD	\$50.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Volatiles (EPA 524)	\$195.00 each	0	\$0
Hardness(EPA 130.2)	\$15.00 each	0	\$0
Alkalinity(EPA 310)	\$12.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS

Volatiles (TCL)	\$180.00 each	0	\$0
B/N/A (TCL)	\$400.00 each	0	\$0
Pest./PCBs (TCL)	\$180.00 each	0	\$0
Total Metals & CN(TAL)	\$170.00 each	0	\$0
Spec Cond(EPA 9050)	\$8.00 each	0	\$0
Total Organic Carbon (L. Kahn)	\$60.00 each	0	\$0
TOX (EPA 9056)	\$70.00 each	0	\$0
Chloride(EPA 9250)	\$25.00 each	0	\$0
pH (EPA 9045)	\$8.00 each	0	\$0
Nitrate (EPA 353.2)	\$20.00 each	0	\$0

Subtotal Team Laboratory	\$0
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MISC. LABORATORY ANALYSIS

Grain Size Dist	\$120.00 each	0	\$0
TCLP	\$1,500.00 each	0	\$0
Moisture Content	\$15.00 each	0	\$0
Bulk Density	\$35.00 each	0	\$0
Chromium (Level II)	\$30.00 each	0	\$0
Total Suspended Solids	\$20.00 each	0	\$0
Total Dissolved Solids	\$20.00 each	0	\$0
Ammonia	\$25.00 each	0	\$0
Phosphate	\$25.00 each	0	\$0
Cation Exchange Capacity	\$100.00 each	0	\$0

Client: U.S. Army Corps of Engineers
Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Task # 13
Project Management
24 Monthly Reports

Prop No: 979002-00001

	Unit			
	Cost	Units	Quantity	Cost
Notes				
RADIOLOGICAL LABORATORY ANALYSIS				
Water Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gross Alpha&Beta	\$45.00	each	0	\$0
Soil Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gamma Spectrometry	\$0.00	each	0	\$0
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0
Sample Prep/Return	\$0.00	each	0	\$0
Wipe Samples For:				
Thorium 232, 230, 227	\$60.00	each	0	\$0
Uranium 238, 235, 233+234	\$60.00	each	0	\$0
Radium 226,223	\$40.00	each	0	\$0
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0
Plutonium 239 + 240	\$65.00	each	0	\$0
Americium 241	\$65.00	each	0	\$0
Gross Alpha&Beta	\$45.00	each	0	\$0
AIR SAMPLES LABORATORY ANALYSIS				
SVOC's	\$490.00	each	0	\$0
Metals	\$150.00	each	0	\$0
Radon (Alpha Film)	\$25.00	each	0	\$0
Subtotal Misc. Laboratory				\$0
INVESTIGATION SUBCONTRACTORS				
Driller	Lump Sum	each	0	\$0
Photogrammetry	Lump Sum	each	0	\$0
IDW Disposal	Lump Sum	each	0	\$0
Surveyor	Lump Sum	each	0	\$0
Subtotal Investigation Subcontractors				\$0
Subtotal Laboratory & Investigation Subcontractors:				\$0
3% Mark-up:				\$0
SUBTOTAL SUBCONTRACTORS:				\$0
				=====
TASK TOTAL:				\$64,303

SUBCONTRACTOR COSTS

BACKUP DATA

LABORATORY SUBCONTRACTOR COSTS

BACKUP DATA

**Laboratory Subcontractor Quote for
Services at the Seneca Army Depot**

Item	Del. Order E - Investigation of SEAD-12 Description of Services*	Unit Cost		Estimated Quantity	Estimated Total Cost
1. NYSDEC CLP TCL VOC's	Perform an analysis of soil or water using the protocols specified in the 12/91 revisions to the NYSDEC Analytical Services Protocol (ASP)	Soil \$	180	306	\$ 55080
		Water \$	180	0	\$ 0
2. NYSDEC CLP TCL Semi-VOC's	Perform an analysis of soil or water using the protocols specified in the 12/91 revisions to the NYSDEC ASP Category B data package	Soil \$	400	306	\$ 122400
		Water \$	400	160	\$ 64000
3. NYSDEC CLP TCL Pest./PCB's	Perform an analysis of soil or water using the protocols specified in the 12/91 revisions to the NYSDEC ASP Category B data package	Soil \$	180	306	\$ 55080
		Water \$	180	160	\$ 28800
4. NYSDEC CLP TAL Inorganics	Perform an analysis of soil or water using the protocols specified in the 12/91 revisions to the NYSDEC ASP Category B data package	Soil \$	170	306	\$ 52020
		Water \$	170	160	\$ 27200
5. EPA Method 8330 Explosives	Perform an analysis of soil or water using the protocols specified in SW-846, with an ASP Category B validatable data package	Soil \$	180	0	\$ 0
		Water \$	180	0	\$ 0
6. EPA Method 524.2 VOC's	Perform an analysis of soil or water using the protocols specified in SW-846, with an ASP Category B validatable data package				
		Water \$	195	226	\$ 44070
7. EPA Method 418.1 TRPH	Perform an analysis of soil or water using the protocols specified in SW-846, with an ASP Category B validatable data package				
		Water \$	50	0	\$ 0
8. ASTM D422-63 Grain Size Analysis	Perform an analysis of soil or water using the protocols specified in ASTM Method D422-63.	Soil \$	120	55	\$ 6600
9. EPA Method 415.1 Total Organic Carbon	Perform an analysis of soil or water using the protocols specified in SW-846, with an ASP Category B validatable data package	Soil \$	60	55	\$ 3300
		Water \$	25	117	\$ 2925
10. EPA Method 130.2 Hardness	Perform an analysis of water using the protocols specified in SW-846, with an ASP Category B validatable data package				
		Water \$	15	117	\$ 1755
11. Asbestos EPA600/M4-82-020	Perform an analysis of soil materials using Polarized Light Microscopy, with dispersion staining. Level 3 delivery package.	Solids	No Bid	0	\$ 0
12. EPA Method 9045 pH	Perform an analysis of water using the protocols specified in SW-846, with an ASP Category B validatable data package	Soil \$	8	55	\$ 440
13. EPA Method 353.2 NO3	Perform an analysis of soil or water using the protocols specified in SW-846, with a Level 4 delivery package.	Soil \$	20	306	\$ 6120
		Water \$	20	117	\$ 2340
14. Iron(Ferrous)	Perform an analysis of soil or water for Iron(Ferrous)				
		Water \$	30	74	\$ 2220

Notes: * - All analyses should include the costs for sample preparation, including extraction.

All analyses should include the costs for sample disposal.

All analyses should include the costs for pre-preserved bottles.

**Laboratory Subcontractor Quote for
Services at the Seneca Army Depot**

Item	Del. Order E - Investigation of SEAD-12 Description of Services*	Unit Cost		Estimated Quantity	Estimated Total Cost
15. Sulfide	Perform an analysis of soil or water for sulfide.				
		Water \$	30	74	\$ 2220
16. BOD	Perform an analysis of soil or water for BOD				
		Water \$	60	74	\$ 4440
17. EPA 300 Sulfate	Perform an analysis of soil or water using the protocols specified in SW-846.				
		Water \$	25	74	\$ 1850
18. COD	Perform an analysis of soil or water for COD				
		Water \$	50	74	\$ 3700
19. EPA 310 Alkalinity	Perform an analysis of soil or water using the protocols specified in SW-846.				
		Water \$	12	117	\$ 1404
20. TCLP	Perform an analysis of soil by Toxicity Characteristic Leaching Procedures.	Soil \$	1500	12	\$ 18000
21. Bulk Density	Perform an analysis of soil for Bulk density.	Soil \$	35	15	\$ 525
22. Total Suspended Solids	Perform an analysis of water for total suspended solids.				
		Water \$	20	43	\$ 860
23. Total Dissolved Solids	Perform an analysis of water for total dissolved solids.				
		Water \$	20	117	\$ 2340
24. Ammonia	Perform an analysis of soil for Ammonia	Soil \$	25	43	\$ 1075
25. Phosphate	Perform an analysis of soil for Phosphate	Soil \$	25	43	\$ 1075
26. CEC	Perform an analysis of soil for cation exchange capacity.	Soil \$	100	55	\$ 5500

Notes: * - All analyses should include the costs for sample preparation, including extraction.

Tot \$517,339.00

All analyses should include the costs for sample disposal.

All analyses should include the costs for pre-preserved bottles.

Name of Laboratory: Core Labs, Inc.
 Address: 420 W. 1ST Street
Casper, WY
82601
 Name and phone
 number of contact
 person: Peter Brixius (307) 235-5741

U.S.A.C.O.E. Missouri River Division certification:

☒ none ☐ current ☐ expired

Business Classifications:

☐ small ☐ disadvantaged ☐ woman owned

Sample Medium: **WATER**

Item #	Radionuclide (and required MDA)	Anticipated Number of Samples	Proposed Analysis Method	Proposed Method MDA for Water Analyses	Analysis Turn Around Time	Proposed Method Cost per Analysis (MX2)	Additional Nuclides Detected by Proposed Analysis
1	Thorium 232 (1 to 5 pCi/L)	231	HASL 300	1 pCi/l	4 week	60.00	\$13,860.00
2	Thorium 230 (1 to 5 pCi/L)	231	HASL 300	1 pCi/l	4 week	(1)	(1)
3	Thorium 227 (1 to 5 pCi/L)	231	HASL 300	1 pCi/l	4 week	(1)	(1)
4	Uranium 238 (1 to 5 pCi/L)	231	HASL 300	1 pCi/l	4 week	60.00	13,860.00
5	Uranium 235 (1 to 5 pCi/L)	231	HASL 300	1 pCi/l	4 week	(4)	(4)
6	Uranium 233+234 (1 to 5 pCi/L)	231	HASL 300	1 pCi/l	4 week	(4)	(4)
7	Radium 226 (1 to 5 pCi/L)	231	EPA 903.1	1 pCi/l	3 week	40.00	9,240.00
8	Radium 223 (1 to 5 pCi/L)	117	EPA 903.1	1 pCi/l	3 week	(7)	(7)
9	Plutonium 239+240 (1 to 5 pCi/L)	117	HASL 300	1 pCi/l	4 week	65.00	7,605.00
10	Americium 241 (1 to 5 pCi/L)	117	HASL 300	1 pCi/l	4 week	65.00	7,605.00
11	Lead 214 (1 to 5 pCi/L)	231	EPA 901.1	1 pCi/l	3 week	80.00	18,480.00
12	Lead 211 (1 to 5 pCi/L)	117	EPA 901.1	1 pCi/l	3 week	(11)	(11)
13	Bismuth 214 (1 to 5 pCi/L)	231	EPA 901.1	1 pCi/l	3 week	(11)	(11)
14	Gross Alpha (10 pCi/L)	231	EPA 900	10 pCi/l	3 week	45.00	10,395.00
15	Gross Beta (25 pCi/L)	231	EPA 900	25 pCi/l	3 week	(14)	(14)
16	Cesium 137 (1 to 5 pCi/L)	231	EPA 901.1	1 pCi/l	3 week	(11)	(11)
17	Cobalt 60 (1 to 5 pCi/L)	231	EPA 901.1	1 pCi/l	3 week	(11)	(11)
18	Alpha Spectroscopy (See MDAs of the alpha emitting isotopes listed above.)	0	HASL 300	1 pCi/l	3-4 week	60.00	0.00

(1) The analysis cost should be based upon providing a Level IV or equivalent data package and should include all preparation costs

(2) Please indicate if multiple isotopes are included in a single analysis cost by referencing the item number of the priced analysis in the cost column of the other isotope(s).

ological Analysis Information Request Sheet

Name of Laboratory: Core Labs, Inc.
 Address: 420 W. 1ST Street
Casper, WY
82601
 Name and phone
 number of contact
 person: _____

U.S.A.C.O.E. Missouri River Division certification:
☒ none ☐ current ☐ expired

Business Classifications:
☐ small ☐ disadvantaged ☐ woman owned

Sample Medium: 100 cm^2 WIPE SAMPLE

Item #	Radionuclide (and required MDA)	Anticipated Number of Samples	Proposed Analysis Method	Proposed Method MDA for Wipe Analyses	Analysis Turn Around Time	Proposed Method Cost per Analysis (11x2)	Additional Nuclides Detected by Proposed Analysis
1	Thorium 232 -(1 to 5 pCi/L)	188	HASL 300	*1 pCi/L	4 week	60.00	\$11,280.00
2	Thorium 230 -(1 to 5 pCi/L)	188	HASL 300	*1 pCi/L	4 week	(1)	(1)
3	Thorium 227 -(1 to 5 pCi/L)	188	HASL 300	*1 pCi/L	4 week	(1)	(1)
4	Uranium 238 -(1 to 5 pCi/L)	188	HASL 300	*1 pCi/L	4 week	60.00	11,280.00
5	Uranium 235 -(1 to 5 pCi/L)	188	HASL 300	*1 pCi/L	4 week	(4)	(4)
6	Uranium 233+234 -(1 to 5 pCi/L)	188	HASL 300	*1 pCi/L	4 week	(4)	(4)
7	Radium 226 -(1 to 5 pCi/L)	188	EPA 903.1	*1 pCi/L	3 week	40.00	7,520.00
8	Radium 223 -(1 to 5 pCi/L)	49	EPA 903.1	*1 pCi/L	3 week	(7)	(7)
9	Plutonium 239+240 -(1 to 5 pCi/L)	49	HASL 300	*1 pCi/L	4 week	65.00	3,185.00
10	Americium 241 -(1 to 5 pCi/L)	49	HASL 300	*1 pCi/L	4 week	65.00	3,185.00
11	Lead 214 -(1 to 5 pCi/L)	188	EPA 901.1	*1 pCi/L	3 week	80.00	15,040.00
12	Lead 211 -(1 to 5 pCi/L)	49	EPA 901.1	*1 pCi/L	3 week	(11)	(11)
13	Bismuth 214 -(1 to 5 pCi/L)	188	EPA 901.1	*1 pCi/L	3 week	(11)	(11)
14	Gross Alpha -(10 pCi/L) --	188	EPA 900.0	*10 pCi/L	3 week	45.00	8,460.00
15	Gross Beta -(25 pCi/L) --	188	EPA 900.0	*25 pCi/L	3 week	(14)	(14)
16	Cesium 137 -(1 to 5 pCi/L)	188	EPA 901.1	*1 pCi/L	3 week	(11)	(11)
17	Cobalt 60 -(1 to 5 pCi/L)	188	EPA 901.1	*1 pCi/L	3 week	(11)	(11)
18	Alpha Spectroscopy (See MDAs of the alpha emitting isotopes listed above.)	0	HASL 300	*1 pCi/L	3-4 week	60.00	0.00

- (1) The analysis cost should be based upon providing a Level IV or equivalent data package and should include all preparation costs.
 (2) Please indicate if multiple isotopes are included in a single analysis cost by referencing the item number of the priced analysis in the cost column of the other isotope(s).

* Assuming a single swipe/analyte, water MDAs are achievable.

Radiological Analysis Information Request Sheet

Name of Laboratory: Core Labs, Inc.

Address: 420 W. 1ST Street

Casper, WY

82601

Name and phone
number of contact
person: Peter Brixius (307) 235-5741

U.S.A.C.O.E. Missouri River Division certification:

X none current expired

Business Classifications:

 small disadvantaged woman owned

Sample Medium: **SOILS**

Item #	Radionuclide (and required MDA)	Anticipated Number of Samples	Proposed Analysis Method	Proposed Method MDA for Soil Analyses	Analysis Turn Around Time	Proposed Method Cost per Analysis ⁽¹⁾⁽²⁾	Additional Nuclides Detected by Proposed Analysis
1	Thorium 232 (0.5 pCi/g)	592	HASL 300	0.5 pCi/g	4 week	60.00	\$35,520.00
2	Thorium 230 (0.5 pCi/g)	592	HASL 300	0.5 pCi/g	4 week	(1)	(1)
3	Thorium 227 (0.5 pCi/g)	592	HASL 300	0.5 pCi/g	4 week	(1)	(1)
4	Uranium 238 (0.5 pCi/g)	592	HASL 300	0.5 pCi/g	4 week	60.00	35,520.00
5	Uranium 235 (0.5 pCi/g)	592	HASL 300	0.5 pCi/g	4 week	(4)	(4)
6	Uranium 233+234 (0.5 pCi/g)	592	HASL 300	0.5 pCi/g	4 week	(4)	(4)
7	Radium 226 (0.5 pCi/g)	592	EPA 901.1	0.5 pCi/g	3 week	40.00	23,680.00
8	Radium 223 (0.5 pCi/g)	303	EPA 901.1	0.5 pCi/g	3 week	(7)	(7)
9	Plutonium 239+240 (0.5 pCi/g)	303	HASL 300	0.5 pCi/g	4 week	65.00	19,695.00
10	Americium 241 (0.5 pCi/g)	303	HASL 300	0.5 pCi/g	4 week	65.00	19,695.00
11	Lead 214 (0.5 pCi/g)	592	EPA 901.1	0.5 pCi/g	3 week	(7)	(7)
12	Lead 211 (0.5 pCi/g)	303	EPA 901.1	0.5 pCi/g	3 week	(7)	(7)
13	Bismuth 214 (0.5 pCi/g)	592	EPA 901.1	0.5 pCi/g	3 week	(7)	(7)
14	Gross Alpha (NA)	0	EPA 900.0	10 pCi/g	3 week	45.00	0.00
15	Gross Beta (NA)	0	EPA 900.0	20 pCi/g	3 week	(14)	(14)
16	Cesium 137 (0.5 pCi/g)	303	EPA 901.1	0.5 pCi/g	3 week	(7)	(7)
17	Cobalt 60 (0.5 pCi/g)	303	EPA 901.1	0.5 pCi/g	3 week	(7)	(7)
18	Alpha Spectroscopy (See MDAs of the alpha emitting isotopes listed above.)	0	HASL 300	0.5 pCi/g	3-4 week	60.00	0.00

(1) The analysis cost should be based upon providing a Level IV or equivalent data package and should include all preparation costs

(2) Please indicate if multiple isotopes are included in a single analysis cost by referencing the item number of the priced analysis in the cost column of the other isotope(s).

SURVEYING SUBCONTRACTOR COSTS

BACKUP DATA

RAMESH MODI, P.E.
RESIDENT

 **modi engineering
& land surveying, p.c.**
Minority Business Enterprise
1981 - 1996

DONALD H. FRY, L.S.
LINA R. MODI

February 16, 1996

Parsons Engineering Science, Inc.
Prudential Center
Boston, MA 02199--7697

RECEIVED

**Re: Estimate for Surveying Services
SEAD-12
Seneca Army Depot
Romulus, New York**

FEB 22 1996

E.S. - BOSTON

**Attn: Mr. Michael Ducheneau
Project Manager**

Modi Engineering & Land Surveying, P.C. is pleased to provide a detailed breakdown of our estimate for the above referenced project in accordance with your request on February 16, 1996 to provide surveying services. All rates utilized to prepare this estimate were approved by the Huntsville Corps of Engineers and include direct labor, overhead and fixed fee costs.

Scope of work is as follows:

1) Locations of Samples

<u>Description of Services</u>	<u>Number of Points</u>
Provide Horizontal Survey Control for:	
Seismic Line Nodes	16
EM-31 Geophysical Survey Nodes	50
GPR Geophysical Survey Nodes	20
Soil Gas Locations	25
Surface Water/Sediment Locations	25
Surface Soil Locations	65
Additional Surface Scanning Locations	60
Provide Horizontal and Vertical Survey Control for:	
Monitoring Well Locations	28
Soil Borings	9
Test Pit Locations	20

Two-Man Field Crew: 120 hrs x \$114.82/hr = \$ 13,778.40

2) Monuments

Check horizontal distances and elevations on 3 existing monuments at each site. After commencing the survey, Parsons Engineering Science will provide us with the state plane coordinates and elevations of these monuments.

Two-Man Field Crew: 8 hrs x \$114.82/hr = \$ 918.56

consulting engineers & land surveyors

6260 South Bay Road • Cicero, New York 13039
Phone (315) 699-9006 Facsimile (315) 699-9899



Page 2

3) Tabulated List

Provide a tabulated list of item #1, including there coordinates and elevations as required.

Survey Manager: 24 hrs x \$53.00 = \$ **1,272.00**

4) Description Card

Description card shall show a sketch of each monument and its location relative to reference marks, building, road, poles, etc.

Survey Manager 8 hrs x \$53.00/hr = \$ **424.00**

5) Office Work Provided

All field notes on vertical and horizontal control with computations and adjustments will be submitted on the final control report.

Survey Manager 16 hrs x \$53.00 = \$ **848.00**

Licensed Land Surveyor 4 hrs x \$65.00 = \$ **260.00**

6) AutoCADD

An AutoCADD disk detailing all sample locations, monuments, X- and Y-coordinates and all required elevations will be submitted to your office.

CADD Manager 40 hrs x \$60.00 = \$ **2,400.00**

Total = \$ 19,900.60

Should you require additional information, or have any questions regarding this estimate, please contact Mr. Douglas Keib of this office at (315) 699-9006.

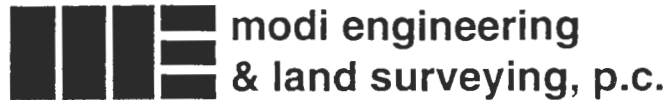
Sincerely,

MODI ENGINEERING &
LAND SURVEYING, P.C.

Lina Modi
Managing Engineer

LM:sp

RAMESH MODI, P.E.
PRESIDENT



Minority Business Enterprise
1981 - 1996

DONALD H. FRY, L.S.
LINA R. MODI

February 20, 1996

Parsons Engineering Science, Inc.
Prudential Center
Boston, MA 02199-7697

**Re: Estimate for Surveying Services
SEAD-12
Seneca Army Depot
Romulus, New York**

**Revised estimate in accordance
with your letter dated 02/19/96:
Archaeological Sample Locations**

**Attn: Mr. Michael Ducheneau
Project Manager**

Modi Engineering & Land Surveying, P.C. is pleased to provide a detailed breakdown of our estimate for the above referenced project in accordance with your request on February 16, 1996 to provide surveying services. All rates utilized to prepare this estimate were approved by the Huntsville Corps of Engineers and include direct labor, overhead and fixed fee costs.

Scope of work is as follows:

1) Locations of Samples

<u>Description of Services</u>	<u>Number of Points</u>
Provide Horizontal Survey Control for:	
Seismic Line Nodes	16
EM-31 Geophysical Survey Nodes	50
GPR Geophysical Survey Nodes	20
Soil Gas Locations	25
Surface Water/Sediment Locations	25
Surface Soil Locations	65
Additional Surface Scanning Locations	60
Provide Horizontal and Vertical Survey Control for:	
Monitoring Well Locations	28
Soil Borings	9
Test Pit Locations	20
Archaeological Sample Locations	600

Two-Man Field Crew: 200 hrs x \$114.82/hr = \$ 22,964.00

2) Monuments

Check horizontal distances and elevations on 3 existing monuments at each site. After commencing the survey, Parsons Engineering Science will provide us with the state plane coordinates and elevations of these monuments.

Two-Man Field Crew: 8 hrs x \$114.82/hr = \$ 918.56

consulting engineers & land surveyors

6260 South Bay Road • Cicero, New York 13039
Phone (315) 699-9006 Facsimile (315) 699-9899



Page 2

3) Tabulated List

Provide a tabulated list of item #1, including there coordinates and elevations as required.

Survey Manager: 48 hrs x \$53.00 = \$ 2,544.00

4) Description Card

Description card shall show a sketch of each monument and its location relative to reference marks, building, road, poles, etc.

Survey Manager 8 hrs x \$53.00/hr = \$ 424.00

5) Office Work Provided

All field notes on vertical and horizontal control with computations and adjustments will be submitted on the final control report.

Survey Manager 16 hrs x \$53.00 = \$ 848.00

Licensed Land Surveyor 4 hrs x \$65.00 = \$ 260.00

6) AutoCADD

An AutoCADD disk detailing all sample locations, monuments, X- and Y-coordinates and all required elevations will be submitted to your office.

CADD Manager 80 hrs x \$60.00 = \$ 4,800.00

Total = \$ 32,758.56

Should you require additional information, or have any questions regarding this estimate, please contact Mr. Douglas Keib of this office at (315) 699-9006.

Sincerely,

MODI ENGINEERING &
LAND SURVEYING, P.C.

Lina Modi
Managing Engineer

LM:sp

LOCKWOOD
MAPPING, INC.



36 KARLAN DRIVE • ROCHESTER, NEW YORK 14617
716-342-5810 FAX: 716-342-6847

February 16, 1996

Mr. Mark E. Baker
Remediation Manager
Parsons Engineering Science, Inc.
Prudential Center
Boston, MA 02199-7697

Re: L.M.I. Project 6366/94
Remedial Investigation at SEAD-12
Seneca Army Depot

Dear Mark:

In response to our telephone conversation and your follow-up FAX note, Lockwood Mapping would produce mapping for the area requested for \$35.00 per acre, the same price as the previous mapping area. Since we are now considering a fairly large area, we should incorporate the existing ground control with some new survey points and an analytical aerial triangulation for control densification and extension.

Such triangulation would cost an additional \$975.00.

Mapping would be produced at 1"/50' with 2' contours as before, and presented as both ink on mylar plots and AutoCAD disks.

Should you have any questions, please call.

Sincerely,

Lockwood Mapping, Inc.

Keith P. Adams

KPA:bss

Seneca Army Depot
SEAD-12
Aerial Mapping Services

ITEM	UNIT COST	ESTIMATED QUANTITY	TOTAL COST
Aerial Mapping	\$35.00/acre	875	\$30,625.00
Aerial Triangulation	\$975.00	1	\$975.00
TOTAL			\$31,600.00

DRILLING SUBCONTRACTOR COSTS

BACKUP DATA

**Drilling Subcontractor Quote for
Services at the Seneca Army Depot**

Item	Remedial Investigation of SEAD-12 Description of Services	Estimated Quantity	Maxim Tech. Unit Cost	Maxim Tech. Total Cost	N. Star Unit Cost	N. Star Total Cost	A. Auger Unit Cost	A. Auger Total Cost
1. Mobilization/ Demobilization	Mob./Demob. a truck mounted drilling rig to the site in Romulus, NY. Include security requirements to enter the base.	2	\$325 per event	\$650	\$250 per event	\$500	\$800 per event	\$1,600
2. Per Diem	Provide meals and living costs for one drilling crew during the conduct of drilling services.	33	\$0 per day	\$0	\$0 per day	\$0	\$90 per day	\$2,970
3 Install Soil Gas Probes	Provide a cost to drive an AW Drilling Rod into the subsurface soil approximately 5 feet. Cost will include rod removal.	120	\$60 per probe	\$7,200	\$25 per probe	\$3,000	\$50 per probe	\$6,000
4. Construct a Decon. Pad	Construct a temporary decon. pad, on-site, to perform all decon. of drilling equipment. Pad will collect all decon. water.	1	\$200 per pad	\$200	\$100 per pad	\$100	\$500 per pad	\$500
5. Decon. Time	Provide an hourly rate to steam decon. drilling equipment; include decon. equipment rental.	66	\$140 per hour	\$9,240	\$125 per hour	\$8,250	\$105 per hour	\$6,930
6. Provide Empty Drums	Provide a cost to supply a DOT approved steel drum, with covers, to contain all drilling wastes, including decon. water.	46	\$55 per drum	\$2,530	\$50 per drum	\$2,300	\$35 per drum	\$1,610
7. Move Drums	Provide a cost to move a drum, 3/4 full, a distance of 100 ft to a central storage location	46	\$25 per drum	\$1,150	\$25 per drum	\$1,150	\$35 per drum	\$1,610
8. Hollow Stem Augering	Provide cost to perform Hollow Stem Augering using a 6.25" auger with a plug.	370	\$16 per foot	\$5,920	\$15 per foot	\$5,550	\$17 per foot	\$6,290
9. Hollow Stem Augering	Provide cost to perform Hollow Stem Augering using a 10" auger with a plug.	0	\$0 per foot	\$0	\$50 per foot	\$0	\$19 per foot	\$0
10. Split-Spoon Sampling	Provide a cost to collect a 3" split-spoon sample, following the completion of Hollow Stem Augering.	185	\$16 per split-spoon	\$2,960	\$15 per split-spoon	\$2,775	\$18 per split-spoon	\$3,330
11. Standby Time	Provide a cost for the drilling crew to standby during completion of an activity.	66	\$140 per hour	\$9,240	\$125 per hour	\$8,250	\$100 per hour	\$6,600
12. Grout Boreholes	Provide a cost to grout a borehole upon completion of soil sampling activities.	90	\$8 per foot	\$720	\$4 per foot	\$360	\$8 per foot	\$720
13. Installation of Monitoring Wells	Provide a cost, including materials, to install a 15' overburden monitoring well as specified in the attached text.	28	\$225 per well	\$6,300	\$225 per well	\$6,300	\$200 per well	\$5,600
14. Ballards	Provide a cost, including materials, to install three ballards around each monitoring well.	28	\$75 per well	\$2,100	\$150 per well	\$4,200	\$225 per well	\$6,300
15 Concrete Collar	Provide a cost, including materials, to install a concrete collar around each monitoring well	28	\$100 per well	\$2,800	\$25 per well	\$700	\$75 per well	\$2,100
16. Steel Casing	Provide a cost, including materials, to install a 4" steel casing, with a cap & a weep hole.	28	\$100 per well	\$2,800	\$100 per well	\$2,800	\$100 per well	\$2,800
17. Brass Locks	Provide a cost to supply a brass, weather resistant, lock for each well.	28	\$25 per well	\$700	\$10 per well	\$280	\$20 per well	\$560
18. Bulldozer	Provide a cost to supply a bulldozer to tow the drill rig, include standby, mob. & operator.	1	\$500 per week	\$500	\$1,000 per week	\$1,000	\$800 per week	\$800
19. Level C Surcharge	Provide a cost for the drill crew to upgrade to Level C, including support equipment.	30	\$30 per hour	\$900	\$50 per hour	\$1,500	\$20 per hour	\$600
20. Level B Surcharge	Provide a cost for the drill crew to upgrade to Level B, including support equipment.	10	\$150 per hour	\$1,500	\$150 per hour	\$1,500	\$80 per hour	\$800
TOTALS				\$57,410		\$50,515		\$57,720



Inc.

P.O. Box 67, Cortland, NY 13045

Phone: 607-756-8820

Fax: 607-753-9911

Transmittal

Date: February 16, 1996

To: Parsons Engineering Science, Inc.
Prudential Center
Boston, MA 02199

Attn: Michael Duchesneau, P.E.

Re: Seneca Army Depot
Romulus, New York

From: Jeff Thew

We are sending you by fax, with original by mail, the attached Drilling Subcontractor Quote for technical drilling services in connection with the referenced project as per your letter request of February 15, 1996.

The Contractor Safety Data Questionnaire will be forwarded by mail, along with the original quote.

If you should have any questions or require additional information, please do not hesitate to call. We thank you for the invitation to quote on this work and look forward to the possibility of being of service on the project.

JJT:pb

Encs.

Environmental and Geotechnical Drilling Services

**Drilling Subcontractor Quote for
Services at the Seneca Army Depot**

Item	Remedial Investigation of SEAD-12 Description of Services	Unit Cost	Estimated Quantity	Estimated Total Cost
1. Mobilization/ Demobilization	Mob./Demob. a truck mounted drilling rig to the site in Romulus, NY. Include security requirements to enter the base.	\$ 250.00 per event	2	\$ 500.00
2. Per Diem	Provide meals and living costs for one drilling crew during the conduct of drilling services.	\$ 0.00 per day	33	\$ 0.00
3 Install Soil Gas Probes	Provide a cost to drive an AW Drilling Rod into the subsurface soil approximately 5 feet. Cost will include rod removal.	\$ 25.00 per probe	120	\$3,000.00
4. Construct a Decon. Pad	Construct a temporary decon. pad, on-site, to perform all decon. of drilling equipment. Pad will collect all decon. water.	\$ 100.00 per pad	1	\$ 100.00
5. Decon. Time	Provide an hourly rate to steam decon. drilling equipment, include decon. equipment rental.	\$ 125.00 per hour	66	\$8,250.00
6. Provide Empty Drums	Provide a cost to supply a DOT approved steel drum, with covers, to contain all drilling wastes, including decon. water.	\$ 50.00 per drum	46	\$2,300.00
7. Move Drums	Provide a cost to move a drum, 3/4 full, a distance of 100 ft to a central storage location	\$ 25.00 per drum	46	\$1,150.00
8. Hollow Stem Augering	Provide cost to perform Hollow Stem Augering using a 6.25" auger with a plug.	\$ 15.00 per foot	370	\$5,550.00
9. Hollow Stem Augering	Provide cost to perform Hollow Stem Augering using a 10" auger with a plug.	\$ 50.00 per foot	0	\$ 0.00
10. Split-Spoon Sampling	Provide a cost to collect a 3" split-spoon sample, following the completion of Hollow Stem Augering.	\$ 15.00 per split-spoon	185	\$2,775.00
11. Standby Time	Provide a cost for the drilling crew to standby during completion of an activity.	\$ 125.00 per hour	66	\$8,250.00
12. Grout Boreholes	Provide a cost to grout a borehole upon completion of soil sampling activities.	\$ 4.00 per foot	90	\$ 360.00
13. Installation of Monitoring Wells	Provide a cost, including materials, to install a 15' overburden monitoring well as specified in the attached text.	\$ 225.00 per well	28	\$6,300.00
14. Ballards	Provide a cost, including materials, to install three ballards around each monitoring well.	\$ 150.00 per well	28	\$4,200.00
15 Concrete Collar	Provide a cost, including materials, to install a concrete collar around each monitoring well	\$ 25.00 per well	28	\$ 700.00
16. Steel Casing	Provide a cost, including materials, to install a 4" steel casing, with a cap & a weep hole.	\$ 100.00 per well	28	\$2,800.00
17. Brass Locks	Provide a cost to supply a brass, weather resistant, lock for each well.	\$ 10.00 per well	28	\$ 280.00
18. Bulldozer	Provide a cost to supply a bulldozer to tow the drill rig, include standby, mob. & operator.	\$1000.00 per week	1	\$1,000.00
19. Level C Surcharge	Provide a cost for the drill crew to upgrade to Level C, including support equipment.	\$ 50.00 per hour	30	\$1,500.00
20. Level B Surcharge	Provide a cost for the drill crew to upgrade to Level B, including support equipment.	\$ 150.00 per hour	10	\$1,500.00

WASTE DISPOSAL SUBCONTRACTOR COSTS
BACKUP DATA

**Seneca Army Depot
RI/FS at SEAD-12
Waste Disposal Costs**

ITEM	UNIT COST	UNIT	ESTIMATED QUANTITY	TOTAL COST
Transportation/Round Trip	\$850	Trip	2	\$1,700
Transp. /Round Trip Vac. Truck	\$850	Trip	1	\$850
Disposal of Soil Drums	\$202	Drum	9	\$1,814
Disposal of Empty Drums	\$25	Drum	47	\$1,175
Inspection Fee	\$0	Each	1	\$0
Demurrage Time (Loading)	\$75	Hour	10	\$750
Bulk Rate for Liquid Disposal	\$0.60	Gallon	560	\$333
Additional Labor	\$35	Hour	14	\$490
Disposal of Liquid Drum	\$106	Drum	14	\$1,477
Overpacks of Liquid Drums	\$100	Drum	14	\$1,400
TOTALS				\$9,989

**Seneca Army Depot
RI/FS at SEAD-12
Waste Disposal Costs**

ITEM	UNIT COST	UNIT	ESTIMATED QUANTITY	TOTAL COST
Transportation/Round Trip	\$850	Trip	2	\$1,700
Transp. /Round Trip Vac. Truck	\$850	Trip	1	\$850
Disposal of Soil Drums	\$202	Drum	9	\$1,814
Disposal of Empty Drums	\$25	Drum	47	\$1,175
Inspection Fee	\$0	Each	1	\$0
Demurrage Time (Loading)	\$75	Hour	10	\$750
Bulk Rate for Liquid Disposal	\$0.60	Gallon	560	\$333
Additional Labor	\$35	Hour	14	\$490
Disposal of Liquid Drum	\$106	Drum	14	\$1,477
Overpacks of Liquid Drums	\$100	Drum	14	\$1,400
TOTALS				\$9,989

Note: The unit cost column of this table includes any applicable insurance surcharges.
Insurance surcharges are \$5.50 / drum and \$0.035 / gallon of liquid waste.

**Seneca Army Depot
RI/FS at SEAD-12
Waste Disposal Costs**

ITEM	UNIT COST	UNIT	ESTIMATED QUANTITY	TOTAL COST
Transportation/Round Trip	\$ 850.00	Trip	2	\$1700.00
Disposal of Soil Drum	\$ 196.00	Drum	9	\$1764.00
Inspection Fee	\$	Each	1	
Bulk Rate for Liquid Disposal	\$ 0.56	Gallon	560 *	\$313.00
Disposal of Liquid Drum	\$ 100.00	Drum	14	\$1400.00

- * I. Transportation of Bulk Liquid(Vac Trk) \$850.00 Trip 2 \$1700.00
- II. Additional Labor (if necessary) \$ 35.00 Hour 14 \$490.00
- III. 85 Gallon Overpacks (if necessary) \$100.00 Drum EA
- IV. Demurrage Time (Loading on Site) \$ 75.00 Hour HR
- V. Empty Drums \$ 25.00 Drum EA
- VI. Insurance Surcharges:
Drums@ \$5.50/drum
Gallons@ \$0.035/gallon